Name: Foster, I Category: A FTE: 0.20

Identifier: 0710830075092 Year of entry:

Research groups:

RA2 - Research outputs

Output number: 1 Output type: Journal article

Title:

Changing suspended sediment and particulate phosphorus loads and pathways in underdrained lowland agricultural

catchments; Herefordshire and Worcestershire, U.K.

Journal title: Hydrobiologia

Month/year of publication: March 2003 Pagination: 119-126 Volume: 494

ISSN: 0018-8158

URL: http://dx.doi.org/10.1023/A:1025497728181

DOI: 10.1023/A:1025497728181

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 3

1: Chapman, A.S External author: Yes
2: Hodgkinson, R.M External author: Yes
3: Jones, A.R External author: Yes

Other relevant details:

Foster: obtained funding from EA & wrote paper. Chapman: PhD student on related Defra-funded project. Hodgkinson: collaborator on project providing data for Chapman's PhD. Jones: EA funded MSc student providing core data. Lees: PDRF co-ordinating research projects at Coventry. Turner: technician; oversaw operation of Coventry laboratories Scott: EA contract manager.

Output number: 2 Output type: Journal article

Title:

Sediment and phosphorus delivery from field to river via land drains in England and Wales. A risk assessment using field and national databases.

Journal title: Soil Use and Management

Month/year of publication: December Pagination: 347-355 Volume: 19(4)

2003

ISSN: 0266-0032

DOI:

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 1

1: Chapman, A.S. External author: Yes 2: Hodgkinson, R.J. External author: Yes 3: Lees, J.A. External author: Yes

Other relevant details:

Chapman: PhD student (Foster; Director of Studies). Foster: obtained Defra funding and oversaw and edited paper. Lees: PDRF co-ordinating research projects at Coventry. Hodgkinson: collaborator on project providing data for Chapman's PhD. Jackson: Chapmans PhD second supervisor on phosphorus dynamics.

Output number: 3 Output type: Journal article

Title:

Post Depositional ¹³⁷Cs mobility in the sediments of three shallow coastal lagoons, SW England

Journal title: Journal of Paleolimnology

Month/year of publication: May 2006 Pagination: 881-895 Volume: 35(4)

ISSN: 0921-2728

URL: http://dx.doi.org/10.1007/s10933-005-6187-6

DOI: 10.1007/s10933-005-6187-6

Research group:

Co-authors: Additional authors: 1

1: Mighall, T.M. External author: Yes 2: Proffitt, H. External author: Yes 3: Walling, D.E. External author: Yes

Other relevant details:

Foster: initiated research programmes associated with paper and wrote it.. Mighall: co-supervisor on Proffit's PhD and edited paper. Proffitt: self-funded PhD student working on all supporting elements; Walling: provided 137Cs analysis on some earlier data sets and commented on paper; Owens: edited paper and collected samples for analysis.

Output number: 4 Output type: Journal article

Title:

Sediment tracing and environmental history for two small catchments, Karoo Uplands, South Africa.

Journal title: Geomorphology

Month/year of publication: October 2007 Pagination: 126-143 Volume: 90(1-2)

ISSN: 0169-555X

URL: http://dx.doi.org/10.1016/j.geomorph.2007.01.011

DOI: 10.1016/j.geomorph.2007.01.011

Research group:

Co-authors: Additional authors:

1: Boardman, J. External author: Yes 2: Keay-Bright, J. External author: Yes

Other relevant details:

Boardman and Foster obtained NERC funding for the research, from which the paper was written. Foster wrote the paper while Boardman and Keay-Bright made significant editorial contributions. Keay-Bright: Oxford funded PhD student (supervised by Boardman) made significant contributions to fieldwork and whose PhD project provided important background information.

Name: Lewis, J.M. Category: A FTE: 1.00

Identifier: 9010831363949 Year of entry:

Research groups:

RA2 - Research outputs

Output number: 1 Output type: Journal article

Title:

The cyst-theca relationship of *Bitectatodiniumtepikiense* (Dinophyceae)

Journal title: European Journal of Phycology

Month/year of publication: May 2001 Pagination: 137-146 Volume: 36(2)

ISSN: 0967-0262

URL: http://dx.doi.org/10.1080/09670260110001735288

DOI: 10.1080/09670260110001735288

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 1

1: Ellegaard, M.External author: Yes2: Mudie, P.J.External author: No3: Rochon, A.External author: No

Other relevant details:

Forms part of a body of work linking the cysts of dinoflagellates with their motile cells having impact on our biological understanding of these organisms and assisting in geological interpretation of their fossil record. The main author initiated and designed the project and carried out the majority of the observations.

Output number: 2 Output type: Journal article

Title:

Cyst-theca relationship, life cycle, and effects of temperature and salinity on the cyst morphology of *Gonyaulaxbaltica* sp. nov.

(Dinophyceae) from the Baltic Sea area **Journal title:** Journal of Phycology

Month/year of publication: August 2002 Pagination: 775-789 Volume: 38(4)

ISSN: 0022-3646

URL: http://dx.doi.org/10.1046/j.1529-8817.2002.01062.x

DOI: 10.1046/j.1529-8817.2002.01062.x

Is duplicate: No Is interdisciplinary: Yes Pending publication: No

Research group:

Co-authors: Additional authors: 0

1: Ellegaard, M. External author: No 2: Harding, I. External author: Yes

Other relevant details:

Part of a body of work exploring dinoflagellate cyst morphology in palaeoecological interpretation. An interdisciplinary study cross-referencing living material and the fossil record and the first published work modeling the influence of environmental factors on dinoflagellate cyst morphology. Main author intitiated and designed the project and contributed to taxonomic observations.

Output number: 3 Output type: Journal article

Title:

Morphological and LSU rDNA sequence variation within the *Gonyaulax spinifera-Spiniferites* group (Dinophyceae) and proposal

of G. elongata comb. nov. and G. membranacea comb. nov.

Journal title: Phycologia

Month/year of publication: April 2003 Pagination: 151-164 Volume: 42(2)

ISSN: 0031-8884

DOI:

Is duplicate: No Is interdisciplinary: Yes Pending publication: No

Research group:

Co-authors: Additional authors: 1

1: Daugbjerg, N. External author: Yes 2: Ellegaard, M. External author: No 3: Rochon, A. External author: No

Other relevant details:

Part of a body of work linking cysts of dinoflagellates with their motile cells. This has impact on understanding their biology and assists in geological interpretation of their fossil record. First published molecular work on the Spiniferites group. Main author intitiated and designed project and contributed to taxonomic observations.

Output number: 4 Output type: Journal article

Title:

In situ identification and localization of bacteria associated with *Gyrodinium instriatum* (Gymnodiniales, Dinophyceae) by electron and confocal microscopy

Journal title: European Journal of Phycology

Month/year of publication: November Pagination: 523-530 Volume: 37(4)

2002

ISSN: 0967-0262

URL: http://dx.doi.org/10.1017/S0967026202003955

DOI: 10.1017/S0967026202003955

Research group:

Co-authors: Additional authors: 1

1: Alverca, E. External author: Yes 2: Biegala, I.C. External author: Yes 3: Kennaway, G.M. External author: No

Other relevant details:

Forms part of a body of work exploring bacterial-dinoflagellate interactions and is the first characterization of the bacterial flora associated with this species.

Main author contributed to the design and implementation of this study and to the interpretation of the results.

Name: McEldowney, S. Category: A FTE: 1.00

Identifier: 8610831255773 Year of entry:

Research groups:

RA2 - Research outputs

Output number: 1 Output type: Conference contribution

Title:

A case study in environmental risk and its assessment in the BSE epidemic: lessons for the future

Conference: Anglo-Japanese Academy Proceedings of the Conference on National, Regional and Global Transition: a common

agenda for Anglo-Japanese relations in the twenty-first century, 07-08 Sep 2001, Tokyo, Japan

Month/year of publication: 07/09/2001 Number of pages: 305-312

Media of output:

ISSN:

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 0

Output number: 2 Output type: Authored book

Title:

Environmental law and regulation

Publisher: Blackstone

Year of publication: 2001 Number of pages: 225

ISBN: 1841741140

Research group:

Co-authors: Additional authors: 0

1: McEldowney, J.F. External author: Yes

Other relevant details:

The book provides a discussion of environmental standard setting in the context of risk assessment and regulatory and

policy-making constraints. It forms part of a continuing focus of work on environmental standards.

Output number: 3 Output type: Chapter in book

Title:

EU chemicals policy - a foundation for environmental protection or a missed opportunity?

Editors: Etty, T.F.M., Somsen, H., Kramer, L., Lee, M. and Scott, J.

Book title: Yearbook of European environmental law

Publisher: Oxford University Press

Year of publication: 2005 Pagination: 85-116

ISBN: 0199267863

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 0

Other relevant details:

This article continues the body of work examining the consequences of scientific risk assessment and uncertainty for

environmental regulation and the application of the precautionary principle.

Output number: 4 Output type: Journal article

Title:

Viewpoint: Science education and the public interest

Journal title: Law, Science and Policy

Month/year of publication: August 2005 Pagination: 251-268 Volume: 2(4)

ISSN: 1475-5335

DOI:

Research group:

Co-authors: Additional authors:

Other relevant details:

This article represents a consideration of the role of science education in improving the communication of risk and scientific uncertainty by scientists and links to building the understanding of the public and policy-makers in developing appropriate precautionary responses

2005

Name: Petts, G. Category: A FTE: 1.00

Identifier: 0000795068229 Year of entry:

Research groups:

RA2 - Research outputs

Output number: 1 Output type: Journal article

Title:

Riparian vegetation and island formation along the gravel-bed Fiume Tagliamento, Italy

Journal title: Earth Surface Processes and Landforms

Month/year of publication: January 2001 Pagination: 31-62 Volume: 26(1)

ISSN: 0197-9337

URL: http://dx.doi.org/10.1002/1096-9837(200101)26:1<31::AID-ESP155>3.0.CO;2-Y

DOI: 10.1002/1096-9837(200101)26:1<31::AID-ESP155>3.0.CO;2-Y

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors: 4

1: Gurnell, A.M. External author: Yes 2: Hannah, D.M. External author: Yes 3: Smith, B.P.G. External author: Yes

Other relevant details:

1st major paper to raise importance of managing riparian woodland for channel form and dynamics and biodiversity within river corridors based on collaborative research programme between University of Birmingham (NERC funded) and ETH Zurich with 4 equal PIs (Edwards, Gurnell, Petts, Ward). Gurnell led this paper.

Output number: 2 Output type: Journal article

Title:

Dams and geomorphology: research progress and future directions

Journal title: Geomorphology

Month/year of publication: October 2005 Pagination: 27-47 Volume: 71(1-2)

ISSN: 0169-555X

URL: http://dx.doi.org/10.1016/j.geomorph.2004.02.015

DOI: 10.1016/j.geomorph.2004.02.015

Research group:

Co-authors: Additional authors: 0

1: Gurnell, A.M. External author: Yes

Other relevant details:

Invited paper for Binghampton Symposium reflecting on 25 years of research on regulated rivers and integrating more recent work on riparian woodland dynamics. Includes new conceptual model to reinterpret past changes and identifies future research needs for improved management of regulated streams. Petts (0.8)

Output number: 3 Output type: Journal article

Title:

Legitimizing fluvial ecosystems as users of water: an overview

Journal title: Environmental Management

Month/year of publication: October 2002 Pagination: 455-467 Volume: 30(4)

ISSN: 0364-152X

URL: http://dx.doi.org/10.1007/s00267-002-2734-3

DOI: 10.1007/s00267-002-2734-3

Research group:

Co-authors: Additional authors: 2

1: Bunn, S.E. External author: Yes
2: Naiman, R.J. External author: Yes
3: Nilsson, C. External author: Yes

Other relevant details:

Paper arising from membership of ICSU (International Council for Science) Scientific Committee on Water Research addressing scientific basis for evaluating environmental flows in water resources policies and planning. Petts environmental hydrologist in team. Paper: Naiman (Chair: 0.25) + 4 equal Co-Pls (0.18) + research assistant (0.03).

Output number: 4 Output type: Journal article

Title:

Advancing science for water resources management

Journal title: Hydrobiologia

Month/year of publication: July 2006 Pagination: 277-288 Volume: 565(1)

ISSN: 0018-8158

URL: http://dx.doi.org/10.1007/s10750-005-1919-1

DOI: 10.1007/s10750-005-1919-1

Research group:

Co-authors: Additional authors: 0

1: Kennedy, R.External author: Yes2: Nestler, J.External author: Yes

Other relevant details:

Addresses the needs for new scientifically-sound modeling tools to support the setting of environmental flows in water resources planning. It identifies the need to focus on flow variability and proposes how to integrate physical and biological sciences in

advancing new models. Funded by US Army R & D, Petts (0.6)

Name: Thompson, D. S. Category: A FTE: 1.00

Identifier: 9511230000412 Year of entry:

Research groups:

RA2 - Research outputs

Output number: 1 Output type: Journal article

Title:

How do cell walls regulate plant growth? **Journal title:** Journal of Experimental Botany

Month/year of publication: September Pagination: 2275-2285 Volume: 56(419)

2005

ISSN: 0022-0957

URL: http://dx.doi.org/10.1093/jxb/eri247

DOI: 10.1093/jxb/eri247

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors:

Other relevant details:

A critical examination of current paradigms of plant cell wall biomechanics with a particular focus on regulation of growth raising a number of difficulties. The paper proposes a new model of cell wall behaviour in which spacing between cell wall polymers is critical based upon theories of synthetic polymer rheology.

Output number: 2 Output type: Internet publication

Title:

Cell wall water content has a direct effect on extensibility in growing hypocotyls of sunflower (Helianthus annuus L.)

Publisher: Journal of Experimental Botany

Publication date: 26/09/2007

ISSN: 0022-0957

URL: http://dx.doi.org/10.1093/jxb/erm183

DOI: 10.1093/jxb/erm183

Is duplicate: No Is interdisciplinary: No Pending publication: No

Research group:

Co-authors: Additional authors:

1: Evered, C. External author: No 2: Majevadia, B. External author: No

Other relevant details:

Shows that water content directly affects cell wall biomechanics, suggesting a previously unforeseen effect of water availability on plant growth and supporting the theories developed in 2. Environmental implications are briefly considered. Evered carried out s.e.m. and Majevadia, preliminary work. The conception, design and most experimental work were by Thompson.

Output number: 3 Output type: Journal article

Title:

Extensiometric determination of the rheological properties of the epidermis of growing tomato fruit

Journal title: Journal of Experimental Botany

Month/year of publication: June 2001 Pagination: 1291-1301 Volume: 52(359)

ISSN: 0022-0957

URL: http://dx.doi.org/10.1093/jexbot/52.359.1291

DOI: 10.1093/jexbot/52.359.1291

Research group:

Co-authors: Additional authors:

Other relevant details:

A detailed rheological characterisation of the biomechanical properties of tomato fruit epidermis with particular focus on those likely to determine growth rates and therefore to be involved in regulation of fruit size and environmental effects on crop yield and quality.

Output number: 4 Output type: Internet publication

Title:

Space and time in the plant cell wall: relationships between cell type, cell wall rheology and cell function

Publisher: Annals of Botany **Publication date:** 27/07/2007

ISSN: 0305-7364

URL: http://dx.doi.org/10.1093/aob/mcm138

DOI: 10.1093/aob/mcm138

Research group:
Co-authors:
Additional authors:

Other relevant details:

Develops the application of theories of synthetic polymer rheology to plant cell walls introduced in 2, including detailed analysis and modelling of the effects of cell wall water content. The consequences for plant physiology are also considered for a number of specific tissues.