

Curriculum Vitae

Professor Ioan Fazey Ph.D., M.Sc., B.Sc. (Hons), PGCTHE, GCert

Professor of Social Dimensions of Environment & Change

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Current Role

My primary role as Professor and Deputy Head of Department of Environment and Geography at the University of York is to facilitate a two year process of strategy development across the Department and beyond that seeks to enable staff achieve their ambitions and mission in ways that ensure the Department's activities are aligned to a rapidly changing global landscape where demands for knowledge about, and solutions for, working with environmental and social challenges are rapidly increasing.

Education

- 2014 Graduate Certificate in Counselling Skills, Abertay University
- 2008 Postgraduate Certificate in Teaching in Higher Education (PGCTHE), Aberystwyth University.
- 2005 Ph.D. on Understanding the Role and Value of Experience for Environmental Conservation, Centre for Resource and Environmental Studies (CRES), The Australian National University.
- 1998 M.Sc. Ecology: Theory and Techniques (distinction), University of Wales, Bangor.
- 1997 B.Sc. Hons. in Zoology (Animal Ecology), 1st Class with Nichols Prize, University of Aberdeen, Scotland.

Academic Awards and Fellowships

- 2014 Adaptation pathways: Fellowship with CSIRO Australia Flagship Programme, June-July 2014
- 2009 Teaching Excellence Award, Aberystwyth University.
- 2005 CRES Writing Fellowship, Australian National University.
- 2000-04 Endowment for Excellence Scholarship, Australian National University.
- 1997-98 NERC M.Sc. Full Scholarship, University of Wales, Bangor.
- 1997 Nichols Prize (highest overall grade in Zoology), Aberdeen University.
- 1996 Zoology Travel Bursary, Aberdeen University.

Professional History

- 2019 Professor Social Dimensions of Environment & Change and Deputy Head of Department for Strategy, Department of Environment and Geography, University of York, UK

- 2013-2019 Professor Social Dimensions of Environmental Change, School of Environment, University of Dundee.
2018 Acting Head of Geography, University of Dundee, UK
- 2015-2018 Director of the Centre for Environmental Change and Human Resilience, University of Dundee
- 2013-2015 Deputy Director of the Centre for Environmental Change and Human Resilience, University of Dundee
- 2011-2013 Senior Lecturer in Sustainable Development, School of Geography and Geosciences, University of St Andrews.
- 2009-11 Lecturer in Sustainable Development, School of Geography and Geosciences, University of St Andrews.
- 2006-09 Lecturer Sustainable Rural Development, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University
- 2005 Development work in the Solomon Islands. Three projects: (1) ecotourism; (2) environmental planning for development; (3) advising communities about teak plantations (with AusAid Forestry).
- 2005 Teaching Assistant, Australian National University, Canberra, Australia.
- 2001-05 Ecological/conservation experience, Australia: Habitat surveys and volunteer management, NSW National Parks and Wildlife Service; surveys of western ringtail possums (Conservation and Land Management, WA); reptile surveys, assistant coordinator of the Arboreal Marsupial Earthwatch Camp and trapping and handling grey headed flying foxes with the Australian National University.
- 1998-2000 Ecological Consultant: liaising between agencies and institutions to achieve conservation outcomes in the U.K. and developing countries. Included projects with Environment Agency, Bangor University, Hyder Consulting, Frontier Tanzania (research coordinator), researcher for Carillion and Laing A55 Joint Venture, BBC Wales, Countryside Council for Wales, Bullens Consulting, Quadrant Consulting, Gwynedd Council.
- 1997 Research Assistant: Water vole populations and dynamic in Cairngorms, Aberdeen University.
- 1995 Research Assistant for Carnivore Study, Madagascar, through Aberdeen University.
- 1989-95 Countryside and conservation management: Range of paid and voluntary work on biodiversity surveys, and practical projects in UK and Internationally (Ecuador, Hong Kong)

Membership of professional bodies and visiting fellowships

- 2014 Visiting researcher: Adaptation Flagship Programme, CSIRO Australia
- 2009- Royal Scottish Geographic Society
- 2009- Fellow of the Higher Education Academy.
- 2005-2012 Departmental Visitor/Visiting Fellow, Fenner School of Environment and Society, Australian National University.
- 1998- Flora and Flora International.
- 1997- British Ecological Society.

RESEARCH

Overview

- International, interdisciplinary and leading research in human-environment relationships and research impact: societal transformation, sustainable learning, vulnerability, resilience, adaptation, environmental change, participation, international development, sustainability, knowledge exchange, knowledge systems;
- 63 peer-reviewed research papers published or in press with 8 x 3-4* REF returnable papers;
- Papers in high impact interdisciplinary journals including: Global Environmental Change: Human and Policy Dimensions (IF 5.679, ranked 3rd of 66 in Environmental Studies); Frontiers in Ecology and the Environment (IF 8.81) and Conservation Letters (IF 7.13); Current Opinion in Environmental Sustainability (4.66).
- H-Index = 34, Citations = 4050 (Scopus), avg. 64 citations per paper
- Project funding >£1.5 million.

- International Research leadership and outreach. Numerous international initiatives, including: Convener of the International Conference ‘Transformations to Sustainability: Transformations in Practice’, University of Dundee (Aug/Sept 2017); Co-Founder of the biennial Transformations Conference Series (Oslo 2013, Stockholm 2015, Dundee 2017 and Santiago in 2019); Co-Founder of the international SDG Transformation Forum; Founder and academic lead of the social enterprise ‘Doing Things Differently’.

Service for international research leadership, outreach and change

2017-	Advisory board of the Centre for Climate Justice, Glasgow Caledonian University
2017-	Trustee of the University of the Third Horizon (H3Uni).
2017-	Co-founder and co-lead of the SDG Transformations Forum
2016-	Advisory board member of Adaptation Scotland
2013-	Transformation conference series continuity committee – founding member.
2019	World Forum on Climate Justice Conference local committee, Glasgow Caledonian University
2017	Convener for the Third Biennial International Conference on Transformations to Sustainability (2017): Transformations in practice, University of Dundee 30-31 st Aug and 1 st Sept 2016
2015-17	Committee and co-founding member of the Transformations Knowledge Action Network of Future Earth
2015	Scientific advisory board, Transformation conference 2015, Stockholm.
2015-17	National Centre for Resilience (Scotland). Key academic representative on the Research and Training Committee
2014-15	Promotions board, James Hutton Institute, Scotland
2013	Scientific Advisory board, Transformation Conference 2013, Oslo
2013-14	Advisory board for the Duchy Originals Soil association Project plus advisor for the Soil Association on evaluation of knowledge exchange programmes;
2012-16	Associate Editor, Animal Conservation.
2011-13	Enhancement Theme Institutional Representative for St Andrews. One of representatives for the Scottish Funding Council cross-institutional scheme that aims to enhance teaching and learning in Higher Education.
2011-2013	Mentoring Research Staff within Department of Geography and Sustainable Development, University of St Andrews.
2010-16	Co-Theme Leader of the Environment and Society Theme of the Scottish Alliance for Geoscience, Environment and Society (SAGES). A major research pooling initiative of the Scottish Funding Council;
2011-2013	Selection committees for new staff, School of Geography and Geosciences, University St Andrews.
2010-11	Committee member of the Centre for Higher Education Research, University St Andrews.
2010-11	Ethics committee, School of Geography and Geosciences, University St Andrews.
2010-11	Advising the EU on development of a network of researchers in the Pacific.
2011	External professional reviews for policy reports: National Centre for Climate Change, Australia
2010-11	Mentoring staff through the St Andrews/Dundee cross institutional mentoring scheme.
2009-10	Equipment committee, School of Geography and Geosciences, University St Andrews.
2009-10	Panel member of the European Science Foundation funded RESCUE working group on ‘Towards a Revolution in education and capacity building’;
2007-09	Initiation and coordination of the Institute of Biological, Environmental and Rural Sciences social science group.
2007-	Reviewer for grant applications for ESRC, EU, British Academy, NERC, CoCooN-CCMCC and many other organisations
2004-	Reviewer for >30 journals. Includes: Amphibian and Reptile Conservation, Animal Conservation, Annals of the Association of American Geographers; Journal of Society and Natural Resources, Biological Conservation, Conservation Biology, Environmental Conservation, Ecological Economics, Ecology and Society, Environmental Education Research, Environmental Management, Environment and Planning C: Policy and Governance; Environmental Modeling and Software; Geoforum, Global Environmental Change: Human and Policy Dimensions, Journal of Applied Ecology, Journal of Environmental Management; Landscape and Urban Planning; Land Use Policy; Norwegian Journal of Geography, Oryx, Society and Natural Resources; Sustainability, Sustainability Science.

- 2002-05 Active involvement in interdisciplinary strategies of the Centre for Resource and Environmental Studies, Australian National University, including initiating and running the Ecological Discussion Group;
- 2000-01 Mammalian, Herpetological and Fish representative for the Gwynedd Biodiversity Action Plan Steering Group; includes organising the production of species action plans;
- 1998-00 Advisor to the North West Wales Water Vole Committee;
- 1996-07 Establishing and leading the Aberdeen Zoological Society seminar series. This received considerable media attention and included high profile speakers.

Outreach and Social Enterprise

Co-founder of the SDG Transformations Forum (<https://www.transformationsforum.net/>), which seeks to support the establishment of transformation systems around specific issues (e.g. health, finance, food sectors), in particular geographical locations, for the forum as a whole, and globally. These systems support capacity, thinking and resources for achieving significant change towards more socially equitable, environmentally sustainable and flourishing human societies. The organization has over 100 active individuals from diverse academic and non-academic organisations working within diverse working groups such as in relation to transforming evaluation methods, narratives and cultural change, finance, innovation, and capacities and capabilities.

Research Grants, Projects and Consultancy

Research Projects/Funding

- Bedinger, M., Carmen, E., Beevers, L., **Fazey, I.**, Knibb, A., Bentz, J., Coninx, I. (2018). Storytelling for Resilience – Communicating Systemic Approaches to Climate Change Scottish Universities Insight Institute **£19,735**.
- Mukherjee, N., **Fazey, I (Co-PI)** and others (2017-18). Transformative flood practices in Bangladesh. Global Resilience Partnership Water Challenge seed project. **\$250,000**.
- Fazey, I**, (PI), Searle, B (Co-I), Kenter, J (Co-I), Hodgson, T. (Co-I), Fraser, J. (Co-I), Williams, J. (Co-I) (2015-17). Change processes for Climate Resilient Futures. Joseph Rowntree Foundation (**£99,957**)
- Hodgson, T. (PI), Hämäläinen, T. (Co-I), and others, including **Fazey, I.** (Co-I) (2016). Exploring second Order Science. Funded by SITRA, Finland (**£20K**).
- Fazey, I** (PI) (2015). Towards developing resilient businesses in Scotland. Critical Infrastructure Resilience Unit, Scottish Government (**£10K**).
- Fazey, I** (PI) (2014-2015). Knowledge Network for Enabling Transformation. Seed funding from the International Social Science Council (**€30K**)
- Fazey, I**, (Co-PI) Gagnon, A. (Co-PI), Russell, S., Wolstenholme, R. (2014-15). Transformation in the face of climate change working across disciplines and policy and practice. Scottish Alliance for Geoscience, Environment and Society (**£9225**).
- Fazey, I.** (PI) (2014) Adaptation pathways. Fellowship to visit CSIRO Australia Flagship Programme, June-July 2014. (**£8400**).
- Fazey, I** (PI). (2013-16). ESRC PhD collaborative studentship from the Scottish Graduate School of Social Science on ‘Learning lessons from community-based resilience plans’ (**£50K**)
- Fazey, I** (2013). Learning lessons from community based resilience plans. Scottish Government Resilience Division (**£10K**).
- Reed, M., (PI), Kenter, J. (Project manager), **Fazey, I. (Co-I)**, Brady, E. (Co-I) O’Brien, L. (Co-I), Christie, M. (Co-I), Cooper, N. (Co-I), Church, A., (Co-I), Everard, M. (Co-I), Fish, R. (Co-I), Hockley, N. (Co-I), Holland, A. (Co-I), Irvine, K. (Co-I), Ravenscroft, N. (Co-I), Ryan, M. (Co-I), Waylen, K. (Co-I). (2012-2014) National Ecosystem Assessment: Shared, cultural and plural values. DEFRA/NERC/EHRC/AHRC (**£250K**).
- Christie, M. (PI), Kenter, J. (Co-PI), Russel, D. (Co-PI), **Fazey, I. (Co-PI)**, Jordan, A. (Co-PI) and others (Co-I) (2011-current) BRIDGE: bridging the gap between the supply of and demand for valuation evidence. NERC (£50k with **£17K** to Fazey) through Valuing Nature Network.
- Fazey I. (PI)** (2006-Current). Livelihoods, vulnerability and managing change in the Solomon Islands. European Union (**Funds totaling £120K, including £90K from EU**). A long term project in Kahua, Solomon Islands, established by

Fazey that aims to investigate and assist 40 communities in an isolated region of the Solomon Islands to improve governance of resource-use and build capacity to adapt to rapid social and environmental change, including climate change and the effects of the transition from a subsistence to a monetary economy. The work has included projects on education, resource-use, change, assessments of vegetation change using remote sensing, marine resource assessments, valuation of ecosystem services, local adaptive capacity, participation and social learning.

- Fazey I. (PI)** Research on adaptive capacity and transformation (2007 – current). This has included impact of teaching of resilience thinking to develop more sophisticated epistemological beliefs of students and contributions to K. O'Brien et al (2009-2011): “Towards a Revolution in Education and Capacity Building”, European Science Foundation Forward Look: Responses to environmental and social challenges for our unsustainable earth (RESCUE). ESF Forward Look 'Frontier of Science' Joint Initiative project.
- Fischer, J. **Fazey, I** (Co-I) and others (Nov 2010- Current). Fostering sustainable development in Eastern Europe. **Alexander von Humboldt Foundation (€ 1.5 million)**. This 4 year project investigated sustainable development in traditional agri-livelihood systems in Transylvania with Romanian partners. Fazey co-supervised 2 PhD students and assisted with research design and implementation of social research.
- Fazey, I**, (PI) Evely, A. (2011-12). Advising the development and implementation of evaluation of knowledge exchange processes for CREW-EPPSI project with James Hutton Institute and St Andrews University. (**£10K**)
- Spray, C. (PI), **Fazey, I. (Co-I)**, Cook, B. (Co-I) and Kesby, M. (Co-I). (2010-11). Gatekeepers of Participation: Water management at the interface of Government and Society. **Insight Knowledge Exchange project (£25K)**. Bringing together international experts to improve understanding of implementing participation in water management.
- Reed, M. (P-I), **Fazey, I. (Co-I)**, and L. Stringer (Co-I) (2010 – 2012). Transforming knowledge for sustainable uplands: Transdisciplinary participatory methods for understanding knowledge exchange processes **RELU/ESRC (£167k) with the PDRA being supervised by Fazey (£93K)**. The work has included workshops with experts and will include developing best practice guidelines for Knowledge Exchange.
- Petterson, M., **Fazey, I. (Co-I)**, Dibben, C. (Co-I), Gaillard, J.C. (Co-I) (2010-11) Resilience to Volcanic and Tsunami Hazards within Indigenous Communities: Savo Volcano Solomon Islands and applications to other archipelago nations. **NERC (£25K)**. A project co-managed by University St Andrews, Leicester University and Auckland University. This has included high level research workshops, community visits in the Solomon Islands and workshops with government and NGOs in the Solomon Islands.
- Christie M. (PI), **Fazey I (Co-PI)** (2008). An Evaluation of Economic and Non-economic Techniques to Assess the Importance of Biodiversity to People in Developing Countries. **DEFRA. (£50K)**. Evaluation of economic and non-economic techniques for assessing the importance of biodiversity to people in developing countries.
- Christie M (PI), Dennis P (Co-I), **Fazey I (Co-I)**, Hyde T (Co-I), Warren J (Co-I), Thomas C (Co-I), Garrod B (Co-I), Gibbons J (Co-I) and Hanley N (Co-I). (2007-2010). Economic Valuation of the Benefits of the UK Biodiversity Action Plan, **DEFRA (£200K)**.
- Fazey, I.** (1997-2000). Consultancy and other projects (**£45K**).

Publications, Reports and Theses

Peer-reviewed journal papers

Published or In Press

63. **Fazey, I.**, Schöpke, N., Caniglia, G., Patterson, J., Hultman, J., van Mierlo, B., Säwe, F., Wiek, A., Wittmayer, J., Aldunce, P., Al Waer, H., Battacharya, N., Bradbury, H., Carmen, E., Colvin, J., Cvitanovic, C., D'Souza, M., Gopel, M., Goldstein, B., Hämäläinen, T., Harper, G., Henfry, T., Hodgson, A., Howden, M.S., Kerr, A., Klaes, M., Lyon, C., Midgley, G., Moser, S., Mukherjee, N., Müller, K., O'Brien, K., O'Connell, D.A., Olsson, P., Page, G., Reed, M.S., Searle, B., Silvestri, G., Spaiser, V., Strasser, T., Tschakert, P., Uribe-Calvo, N., Waddell, S., Rao-Williams, J., Wise, R., Wolstenholme, R., Woods, M., Wyborn, C., 2018. Ten essentials for action-oriented and second order energy transitions, transformations and climate change research. *Energy Research and Social Science* 40, 54-70.
62. **Fazey, I.**, Carmen, E., Chapin, F.S.I., Ross, H., Williams, J., Lyon, C., Connon, I.L.C., Searle, B.A., Knox, K., 2018. Community resilience for a 1.5oC world. *Current Opinion in Environmental Sustainability* 31, 30-40.

61. Carmen, E., Watt, A., Carvalho, L., Dick, J., **Fazey, I.**, Garcia-Blanco, G., Grizzetti, B., Hauck, J., Izakovicova, Z., Kopperoinen, L., Liqueste, C., Odee, D., Steingröver, E., Young, J. (2018) Knowledge needs for the operationalisation of the concept of ecosystem services. *Ecosystem Services*.
60. Colloff, M.J., Lavorel, S., van Kerkhoff, L.E., Wyborn, C.A., **Fazey, I.**, Gorddard, R., Mace, G.M., Foden, W.B., Dunlop, M., Prentice, I.C., Crowley, J., Leadley, P., Degeorges, P. (2017) Transforming conservation science and practice for a postnormal world. *Conservation Biology* 31, 1008-1017.
59. Duvat, V.K.E., Magnan, A.K., Wise, R.M., Hay, J.E., **Fazey, I.**, Hinkel, J., Stojanovic, T., Yamano, H., Ballu, V. (2017) Trajectories of exposure and vulnerability of small islands to climate change. *Wiley Interdisciplinary Reviews: Climate Change* 8.
58. **Fazey, I.**, Moug, P., Allen, S., Beckmann, K., Blackwood, D., Bonaventura, M., Burnett, K., Danson, M., Falconer, R., Gagnon, A.S., Harkness, R., Hodgson, A., Holm, L., Irvine, K.N., Low, R., Lyon, C., Moss, A., Moran, C., Naylor, L., O'Brien, K., Russell, S., Skerratt, S., Rao-Williams, J., Wolstenholme, R. (2017) Transformation in a changing climate: a research agenda. *Climate and Development*, 1-21.
57. Galafassi, D., Daw, T., Munyi, L., Brown, K., Barnaud, C., **Fazey, I.** (2017) Learning about social-ecological trade-offs. *Ecology and Society* 22, 2.
56. Page, G.G., Wise, R.M., Lindenfeld, L., Moug, P., Hodgson, A., Wyborn, C., **Fazey, I.** (2016) Co-designing transformation research: lessons learned from research on deliberate practices for transformation. *Current Opinion in Environmental Sustainability* 20, 86–92.
55. Irvine, K.N., O'Brien, L., Ravenscroft, N., Cooper, N., Everard, M., **Fazey, I.**, Reed, M.S., Kenter, J.O. (2016) Ecosystem services and the idea of shared values. *Ecosystem Services* Volume 21, 184-193.
54. Kenter, J.O., Bryce, R., Christie, M., Cooper, N., Hockley, N., Irvine, K.N., **Fazey, I.**, O'Brien, L., Orchard-Webb, J., Ravenscroft, N., Raymond, C.M., M.S., R., Tett, P., Watson, V. (2016) Shared values and deliberative valuation: Future directions. *Ecosystem Services* 21, 358-371.
53. Kenter, J.O., Reed, M.S., **Fazey, I.** (2016) The Deliberative Value Formation model. *Ecosystem Services* 21, 194-207.
52. Sharpe, B., **Fazey, I.**, Leicester, G., Hodgson, A., Lyon, A. (2016) Three Horizons: A powerful practice for transformation. *Ecology and Society* 21, 47.
51. **Fazey, I.**, Wise, R.M., Lyon, C., Câmpeanu, C., Moug, P., Davies, T.E. (2016) Past and future adaptation pathways. *Climate and Development* 8:1, 26-44.
50. Kenter, J.O., O'Brien, L., Hockley, N., Ravenscroft, N., **Fazey, I.**, Irvine, K.N., Reed, M.S., Christie, M., Brady, E., Bryce, R., Church, A., Cooper, N., Davies, A., Evely, A., Everard, M., Fish, R., Fisher, J.A., Jobstvogt, N., Molloy, C., Orchard-Webb, J., Ranger, S., Ryan, M., Watson, V., Williams, S. (2015) What are shared and social values of ecosystems? *Ecological Economics* 111, 86-99.
49. Djanja, J.L., Christie, M., **Fazey, I.** Hyde, T. (2015) The role of social capital on rural food security: the case study of Dowa and Lilongwe Districts in Central Malawi. *Journal of Agricultural Sciences* 7, 165-176
48. Davies, TE, Clarke, RH, Ewen, JG, **Fazey, I.** Pettorelli, N., Cresswell, W. The effects of land use change on the endemic avifauna of Makira, Solomon Islands: endemics avoid monoculture. *Emu: Austral Ornithology*. 2015: 115 (3): 199,213.
47. Reed, M.S., Stringer, L.C., **Fazey, I.**, Evely, A.C., Kruijssen, J.H.J. (2014) Five principles for the practice of knowledge exchange in environmental management. *Journal of Environmental Management* 146, 337-345.
46. Câmpeanu, C.N., **Fazey, I.** (2014) Adaptation and pathways of change and response: A case study from Eastern Europe. *Global Environmental Change* 28, 351-367.
45. Wise, R.M., **Fazey, I.**, Stafford Smith, M., Park, S.E., Eakin, H.C., Archer Van Garderen, E.R.M., Campbell, B. (2014) Reconceptualising adaptation to climate change as part of pathways of change and response. *Global Environmental Change* 28, 325-336.
44. Davies, T.E., Pettorelli, N., Cresswell, W., **Fazey, I.R.A.** (2014). Who are the poor? Measuring wealth inequality to aid understanding of socioeconomic contexts for conservation: a case-study from the Solomon Islands. *Environmental Conservation* 41: (4) 357-366.
43. Davies, T.E., **Fazey, I.R.A.**, Cresswell, W., Pettorelli, N. (2014) Missing the trees for the wood: Why we are failing to see success in pro-poor conservation. *Animal Conservation* 17, 303-312.
42. Hartel, T., Fischer, J., Câmpeanu, C., Milcu, A.I., Hanspach, J., **Fazey, I.** (2014) The importance of ecosystem services for rural inhabitants in a changing cultural landscape in Romania. *Ecology and Society* 19.
41. **Fazey, I.**, Bunse, L., Msika, J., Pinke, M., Preedy, K., Evely, A.C., Lambert, E., Hastings, E., Morris, S., Reed, M.S. (2014) Evaluating knowledge exchange in interdisciplinary and multi-stakeholder research. *Global Environmental Change* 25, 204-220.

40. Cook, B.R., Kesby, M., **Fazey, I.**, Spray, C. (2013) The persistence of 'normal' catchment management despite the participatory turn: Exploring the power effects of competing frames of reference. *Social Studies of Science* 43, 754-779.
39. Reed, M.S., Kenter, J., Bonn, A., Broad, K., Burt, T.P., **Fazey, I.**, Fraser, E.D.G., Hubacek, K., Nainggolan, D., Quinn, C.H., Stringer, L.C., Ravera, F. (2013) Participatory scenario development for environmental management: A methodological framework illustrated with experience from the UK uplands. *Journal of Environmental Management* 128, 345-362.
38. O'Brien, K., Reams, J., Caspari, A., Dugmore, A., Faghihimani, M., **Fazey, I.**, Hackmann, H., Manuel-Navarrete, D., Marks, J., Miller, R., Raivio, K., Romero-Lankao, P., Virji, H., Vogel, C., Winiwarter, V. (2013) You say you want a revolution? Transforming education and capacity building in response to global change. *Environmental Science and Policy* 28, 48-59.
37. Cook, B. R., Atkinson, M., Chalmers, H., Comins, L., Cooksley, S., Deans, N., **Fazey, I.**, Fenemor, A., Kesby, M., Litke, S., Marshall, D. & Spray, C. (2013) Interrogating participatory catchment organisations: Cases from Canada, New Zealand, Scotland and the Scottish-English Borderlands. *Geographical Journal* 179(3): 234-247.
36. **Fazey, I.**, Evely, A.C., Reed, M.R., Stringer, L.C., Kruijssen, J.H.J., White, P.C.L., Newsham, A., Jin, L., Cortazzi, M., Phillipson, J., Blackstock, K.L., Entwistle, N., Sheate, W.R., Armstrong, F., Blackmore, C., Fazey, J.A., Ingram, J., Gregson, J., Lowe, P., Morton, S., Trevitt, C. (2013). Knowledge Exchange: a review and research agenda for environmental management. *Environmental Conservation* 40 (1): 1
35. Reed, M. S., Podesta, G., **Fazey, I.**, Geeson, N., Hessel, R., Hubacek, K., Letson, D., Nainggolan, D., Prell, C., Rickenbach, M. G., Ritsema, C., Schwilch, G., Stringer, L. C. & Thomas, A. D. (2013) Combining analytical frameworks to assess livelihood vulnerability to climate change and analyse adaptation options. *Ecological Economics* 94: 66-77.
34. Reed, M. S., **Fazey, I.**, Stringer, L. C., Raymond, C. M., Akhtar-Schuster, M., Begni, G., Bigas, H., Brehm, S., Briggs, J., Bryce, R., Buckmaster, S., Chanda, R., Davies, J., Diez, E., Essahli, W., Evely, A., Geeson, N., Hartmann, I., Holden, J., Hubacek, K., Ioris, A. A. R., Kruger, B., Laureano, P., Phillipson, J., Prell, C., Quinn, C. H., Reeves, A. D., Seely, M., Thomas, R., Van der Werff Ten Bosch, M. J., Vergunst, P. & Wagner, L. (2013) Knowledge management for land degradation monitoring and assessment: An analysis of contemporary thinking. *Land Degradation and Development* 24(4): 307-322.
33. Christie, M., **Fazey, I.**, Cooper, R., Hyde, T. & Kenter, J. O. (2012) An evaluation of monetary and non-monetary techniques for assessing the importance of biodiversity and ecosystem services to people in countries with developing economies. *Ecological Economics* 83: 67-78.
32. Fischer, J., Dyball, R., **Fazey, I.**, Gross, C., Dovers, S., Ehrlich, P.R., Brulle, R.J., Christensen, C., Borden, R.J., 2012. Human behavior and sustainability. *Frontiers in Ecology and the Environment* 10, 153-160.
31. Sherren, K., Fischer, J., **Fazey, I.**, 2012. Managing the grazing landscape: Insights for agricultural adaptation from a mid-drought photo-elicitation study in the Australian sheep-wheat belt. *Agricultural Systems* 106, 72-83.
30. **Fazey, I.**, Pettorelli, N., Hyde, T., Kenter, J.O., Wagatora, D., Schuett, D., 2011. Maladaptative trajectories of change in Makira, Solomon Islands. *Global Environmental Change* 21, 1275-1289.
29. Kenter, J.O., Hyde, T., Christie, M., **Fazey, I.**, 2011. The importance of deliberation in valuing ecosystem services in developing countries-Evidence from the Solomon Islands. *Global Environmental Change-Human and Policy Dimensions* 21, 505-521.
28. Evely, A.C., Pinard, M., Reed, M.S., **Fazey, I.**, 2011. High levels of participation in conservation projects enhance learning. *Conservation Letters* 4, 116-126.
27. Conrad, E., Cassar, L.F., Christie, M., **Fazey, I.** (2011), Hearing but not listening? A participatory assessment of public participation in planning. *Environment and Planning C-Government and Policy* 29, 761-782.
26. Conrad, E., Christie, M., **Fazey, I.** (2011). Is research keeping up with changes in landscape policy? A review of the literature. *Journal of Environmental Management* 92, 2097-2108.
25. Conrad, E., Cassar, L.F., Jones, M., Eiter, S., Izakovicova, Z., Barankova, Z., Christie, M., **Fazey, I.**, (2011). Rhetoric and reporting of public participation in landscape policy. *Journal of Environmental Policy and Planning* 13, 23-47.
24. Conrad, E., Christie, M., **Fazey, I.**, 2011. Understanding public perceptions of landscape: A case study from Gozo, Malta. *Applied Geography* 31, 159-170.
23. **Fazey, I.**, 2010. Resilience and Higher Order Thinking. *Ecology and Society* 15, 22.
22. Evely, A.C., **Fazey, I.**, Lambin, X., Lambert, E., Allen, S., Pinard, M. (2010). Defining and evaluating the impact of cross-disciplinary conservation research. *Environmental Conservation* 37, 442-450.
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- 9 **Fazey, I.**, Proust, K., Newell, B., Johnson, B., and Fazey, J. A. (2006). Eliciting the implicit knowledge and perceptions of on-ground conservation managers of the Macquarie Marshes. *Ecology and Society* 11, Art 25.
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Books

Woods, M., Balestrini, M., Bejtullahu, S. , Bocconi, S. , Boerwinkel, G. , Boonstra, M. , Boschman, D-S. , Camprodon, G., Coulson, S., Diez, T. , **Fazey, I.** , Hemment, D. , van den Horn, C. , Ilazi, T. , Jansen-Dings, I. , Kresin, F. , McQuillan, D. , Nascimento, S. , Pareschi, E. , Polvora, A. et al 2018 Making Sense. 221pp

Book Chapters

Kenter, J.O. and **Fazey, I.** (2015). Conservation, culture, kids and cash crops in the Solomon Islands. In: Redpath, S. (ed). *Conservation Conflicts*. Cambridge University Press.

Fazey, I. and Schultz, L. Adaptive people for adaptive management. 2009. In: *Adaptive Environmental Management: A practical guide* (Editors Allan, C., Stankey, G.). Springer.

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Other publications

- Fazey, I.**; Carmen, E.; Rao-Williams, J.; Fraser, J.; Cox, L.; Scott, D.; Hodgson, A.; Tabor, P.; Robeson, D.; Searle, B.; Lyon, C.; Kenter, J.; Murray, B. (2017). Community Resilience to Climate Change. Summary for policy and practice. Centre for Environmental Change and Human Resilience, University of Dundee.
- Fazey, I.**; Carmen, E.; Rao-Williams, J.; Hodgson, A.; Fraser, J.; Cox, L.; Scott, D.; Tabor, P.; Robeson, D.; Searle, B.A.; Lyon, C.; Kenter, J.; Murray, B. (2017). Community Resilience to Climate Change: Outcomes of the Scottish Borders Climate Resilient Communities Project. Centre for Environmental Change and Human Resilience, University of Dundee.
- Woods, M., **Fazey, I.** & Hemment, D. 2016 Recommendations and Guidelines for Engaging Communities with Agencies and Policy Bodies Using Powerful Deliberate Practices. European Commission.
- Kenter, J. O., M. S. Reed, M. Everard, K. N. Irvine, E. O'Brien, C. Molloy, R. Bryce, E. Brady, M. Christie, A. Church, T. Collins, N. Cooper, A. Davies, D. Edwards, A. Evely, **I. Fazey**, R. Goto, N. Hockley, N. Jobstvogt, J. Orchard-Webb, N. Ravenscroft, M. Ryan, and V. Watson, 2014, Shared, plural and cultural values: A handbook for decision-makers. UK National Ecosystem Assessment follow-on phase, Cambridge, UNEP-WCMC.
- Kenter, J. O., M. S. Reed, K. N. Irvine, E. O'Brien, E. Brady, R. Bryce, M. Christie, A. Church, N. Cooper, A. Davies, N. Hockley, **I. Fazey**, N. Jobstvogt, C. Molloy, J. Orchard-Webb, N. Ravenscroft, M. Ryan, and V. Watson, 2014, UK National Ecosystem Assessment follow-on phase. Work Package Report 6: Shared, Plural and Cultural Values of Ecosystems. Cambridge, UNEP-WCMC.
- Lyon, C & **Fazey, I.** Learning lessons from developing community resilience plans in Scotland. University of Dundee and Scottish Government.
- O'Brien, K., Reams, J., Caspari, A., Dugmore, A., Faghihimani, M., **Fazey, I.**, Hackmann, H., Manuel-Navarrete, D., Marks, J., Miller, R., Raivio, K., Romero-Lankao, P., Virje, H., Vogel, C., Winiwarter, V., 2010. You Say you want a revolution? Transforming education and capacity building in response to global change, RESCUE report, ESF.
- Spray, C.J., Cook, B., **Fazey, I.**, Kesby, M., 2012. Water management at the interface of government and society: The role of participatory catchment organisations - implications for policy. Policy Brief, Scottish Universities Insight Institute, Glasgow.
- LWEC, (2012) LWEC Knowledge Exchange Guidelines. Living With Environmental Change (produced by Reed, M. **Fazey, I.** Evely, A. and others).
- Christie, M., **Fazey, I.**, Cooper, R., Hyde, T., Deri, A., Hughes, L., Bush, G., Brander, L., Nahman, A., de Lange, W. and Reyers, B. 2008. *An Evaluation of Economic and Non-economic Techniques for Assessing the Importance of Biodiversity to People in Developing Countries*. Defra: London.
- Christie, M., **Fazey, I.**, and Hyde T 2008. *Economic Valuation of the Benefits of the UK Biodiversity Action Plan: Phase 1 report*. Defra: London
- Fazey I.**, Latham, I., Hagasua, J.E., Wagatora, D 2007. Livelihoods and change in Kahua, Solomon Islands. Preliminary Report to the Kahua Association.
- Fazey, I.** 2004. The need for effective water reform: the views of wetland managers. Page 8 in P. Olsen, and M. Weston, editors. The state of Australia's birds 2004. Supplement to Wingspan, vol. 14 (4). Birds Australia.
- Fazey, I.** 2000. Monitoring water vole populations in offline areas of the A55 Carillion Laing Joint Venture road scheme, Anglesey. Commissioned by CLJV A55.
- Fazey, I.** 2000. Water vole mitigation on the CLJV A55 road scheme: an amendment to the existing guidelines presented in document GD00280/RT/151. Commissioned by Hyder Consulting Ltd.
- Fazey, I.** 1999. Anglesey water vole survey. Document GD00280/RT/006. Commissioned by Hyder Consulting Ltd.
- Salisbury, J., and **I. Fazey** 2002. Evidence-based environmental management: What can medicine and public health tell us? National Institute for the Environment, Australian National University.
- Topp-Jorgenson, E., H. Brink, A. R. Marshall, and **I. Fazey** 2000. Botanical report, Udzungwa Mountains Biodiversity Survey, New Dabaga/Ulangambi Forest Reserve. DANIDA.
- Topp-Jorgenson, E., H. Brink, A. R. Marshall, and **I. Fazey** 2000. Botanical report, Udzungwa Mountains Biodiversity Survey, West Kilombero Scarp Forest Reserve. DANIDA.
- Lambin, X., **I. Fazey**, J. Sansom, J. F. Dallas, W. Stewart, S. B. Piertney, S. F. Palmer, P. J. Bacon, and A. Webb 1998. Aberdeenshire water vole survey: The distribution of isolated water vole populations in the upper catchments of the rivers Dee and Don, Aberdeenshire. Scottish Natural Heritage.

Theses

- Fazey, I.** 2005. Understanding the role and value of experience in environmental conservation. Ph.D. Thesis. Centre for Resource and Environmental Studies. Australian National University, Canberra.
- Fazey, I.** 1998. Calcium, nestling growth and parental care in the pied flycatcher (*Ficedula hypoleuca*). School of Biological Sciences. M.Sc. Thesis. University of Wales, Bangor.
- Fazey, I.** 1997. The effect of a sugar-based resource on the home range of *Microcebus murinus* in a dry deciduous forest of Madagascar. B.Sc. Honours Thesis. Department of Zoology. University of Aberdeen, Aberdeen.

Presentations

Invited Academic Presentations/Conference sessions and Keynotes

39. **Fazey, I** (with others) (Feb 2019). Plenary Panel member of discussion about leverage and transformations, Leuphana University, Luneburg, Germany.
38. **Fazey, I.** (Feb 2019). Transformations and Knowledge. Opening keynote at Leverage Points 2019 Conference, Leuphana University, Luneburg, Germany.
36. **Fazey, I.** (Dec 2018). Knowledge in a transforming world. Christmas Annual Sustainability Lecture, University of Keele, UK.
35. **Fazey, I.** (June 2018). Knowledge and Transformations. Keynote at Collaborations for Change. Environmental Association for Universities and Colleges Annual Conference, University of Keele, UK.
34. **Fazey, I.** (May 2018). Sustainable Development Goals and transformation. Keynote at Seedbeds for Transformation international conference, Future Earth, Port Elizabeth, South Africa.
33. **Fazey, I.** & Carmen, E. (April 2018). Climate Change and Resilience. Keynote at Resilience conference, Scottish Government, Edinburgh.
32. **Fazey, I.** & Shapke, N. (Feb 2018). Ten essentials for action-oriented transformation research. Leuphana University, Luneburg, Germany.
31. **Fazey, I.** (Aug 2017) Accelerating learning about transformation. Keynote at Transformations to Sustainability Conference. University of Dundee.
30. **Fazey, I.** (March 2017) Managing Flood Impacts: Community Engagement. Keynote at 'How can we learn to live with floods?' Royal Society of Edinburgh.
29. **Fazey, I.,** Patterson, J., Shaepke, N. (Sept 2016). Transformational research in a changing climate. Dialogue session at the International Sustainability Transitions conference, Wuppertal, Germany.
28. **Fazey, I.** (Aug 2016). Implementation frameworks for meeting 1.5 °C Paris agreement targets. Keynote at 1.5°C Intergovernmental Panel on Climate Change (IPCC) Special report scoping meeting, Geneva.
27. **Fazey, I.** (June 2016). Transformations in Practice. Webinar presentation to the Transformation Knowledge Action Network, Future Earth
26. **Fazey, I.** (May 2016). Society, resilience and transformation. Keynote at Exploring Resilience Conference, Cardiff.
25. **Fazey, I.** (Feb 2016). Keynote: Beyond resilience: Where next? Keynote Closing presentation, Flood Risk Management Conference, Edinburgh, UK.
24. **Fazey, I.** (Oct 2015). What kinds of research are needed for a transforming world? Key facilitator and academic lead for three consecutive sessions at the Transformations 2015 conference, Stockholm Resilience Centre, Sweden.
23. **Fazey, I.** (October 2014). The role of academia in furthering climate justice. Climate Justice: the Agenda for Action at GCU London.
22. **Fazey, I.** (June 2014). Past and Future Adaptation Pathways. CSIRO, Hobart, Australia.
21. **Fazey, I.** (June 2014). Past and Future Adaptation Pathways. CSIRO, Canberra, Australia.
20. **Fazey, I.** (Feb 2014). Transformation. CECHR Symposium. University of Dundee
19. **Fazey, I.** (Jan 2014). Social dimensions of environmental change. Inaugural Lecture. Dundee Discovery days. University of Dundee.

- 18 **Fazey, I.** (Oct 2013). Trajectories and pathways of change in the Solomon Islands. Back to the Future Workshop, Lo Rochelle, France
- 17 **Fazey, I.** (April 2013). Resilience for the future. Keynote. Facing the future conference. University of Dundee.
- 16 **Fazey, I.** (Dec 2012). Conceptualizing knowledge exchange as a process of co-production of knowledge. Invited speaker. Workshop on modeling conflict and consensus. University of Dundee
- 15 **Fazey, I.** (October 2012). Resilience: concept and applications. Faculty seminar, School of the built environment. Birmingham City University.
- 14 **Fazey, I.** (May 2012). Adaptive trajectories in the face of climate change. Global Change Institute, Aspen, Colorado.
- 13 **Fazey, I.** (April 2011). Resilience in social-ecological systems: adaptation or maladaptation in the Solomon Islands. Centre for Research into Ecological and Environmental Modelling. University St Andrews.
- 12 **Fazey, I.** (February 2011). Resilience and Volcanoes in the Solomon Islands. University of Leicester.
- 11 **Fazey, I.** (February 2011). Houses as important livelihoods assets and their relationship to subsistence and sustainability. Centre for Housing Research. University of St Andrews.
- 10 **Fazey, I.** (Jan 2011). Maladaptation and response in the Solomon Islands. School of Earth and Environment, University of Leeds.
- 9 **Fazey, I.** (November 2010). Maladaptation and Resilience: A case of the Solomon Islands. Scottish Association of Geoscience, Environment and Society Annual Meeting, Dunkeld, Scotland.
- 8 **Fazey, I.** (November 2010). Interdisciplinarity and Conservation: What and Why? Conference for Early Career Researchers in Social-Ecological Systems. Aberdeen University.
- 7 **Fazey I.** (Dec 2009) Payments for ecosystem services and using expertise. Presentation to Policy makers from the Scottish Government.
- 6 **Fazey, I.** (Aug 2008) Maladaptive responses to rapid environmental change. Fenner School of Environment and Society, Australian National University, Canberra.
- 5 **Fazey, I.** (Jan 2008) Learning to learn for Social Ecological Resilience and Biodiversity Conservation in the Solomon Islands. Zoological Society of London.
- 4 **Fazey, I.** (Aug 2006) Understanding the nature and role of experiential knowledge in relation to an evidence-based approach. Symposium on evidence-based conservation, European Society for Conservation Biology, Hungary.
- 3 **Fazey, I.** (Mar 2006) Understanding the nature and role of experiential knowledge for environmental conservation. Department of Zoology, Aberdeen University.
- 2 **Fazey, I.** (Jan 2006) The 'Marshes' research approach used for eliciting implicit experiential knowledge. Research Institute for Enhancing Learning, Ysgol Addysg, University of Wales, Bangor.
- 1 **Fazey, I.** (July 2003) Validity and utility of theoretical tools in conservation biology and does the systematic review process from clinical medicine have a use in conservation? IALE World Congress 2003.

Additional Academic Presentations

35. **Fazey, I.** (Feb 2019). Learning from innovations for participation and engagement in Scotland. Presentation and panel member in a session on transformative innovation, led by B. Goldstein at Leverage Points Conference, Leuphana, Luneburg, Germany.
34. **Fazey, I.** (Feb 2019). Transformation theory. Brief presentation and facilitation of a session workshop in collaboration with S. Waddell, S. Waddock and P. Olsson at Leverage Points Conference, Leuphana, Luneburg, Germany.
33. **Fazey, I.** (June 2015). Powerful deliberate practices for transformative adaptation. Our Common Future under Climate Change. Paris.
32. **Fazey, I.** (May 2015). Wellbeing and Process. Wellbeing and place making symposium, University of Dundee, UK
31. **Fazey, I.** (May 2014). Evaluating knowledge exchange for community resilience. Resilience 2014 conference, Montpellier, France.
30. **Fazey, I.** (June 2013). The transformative and transitory potential of adaptive responses to environmental change. Transformation in a Changing Climate, Oslo.
- 29 **Fazey, I.** (July 2012). Human Behaviour – the many facets relating to environmental sustainability RGS-IBG Conference, Edinburgh

- 28 **Fazey, I.** (July 2012). Money can make you crazy: the pitfalls of rational responses to resource limitations in the Solomon Islands. RGS-IBG Conference, Edinburgh
- 26 **Fazey, I.** When is adaptation maladaptation? (March 2012) (Poster presentation) Planet Under Pressure, London.
- 25 **Fazey I.** (March 2011). Resilience as a concept for our time. Resilience 2011 conference, Arizona State University, USA
- 24 **Fazey I.** (March 2011). Vulnerability and Maladaptation in the Solomon Islands. Resilience 2011 conference, Arizona State University, USA
- 23 **Fazey, I.** (July 2011). A three tiered learning approach to participatory research in the Solomon Islands. Conference for the European Society for Oceanists.
- 22 **Fazey I.** (April 2010). Reducing vulnerability to future environmental change. Earth Systems Science conference. Edinburgh.
- 21 **Fazey I.** (March 2010). Methods for environment-society research participatory research in the Solomon Islands. Scottish Association of Geoscience, Environment and Society. Oban Workshop on Interdisciplinary Methods for Environment.
- 20 **Fazey I.** (Nov 2009). Vulnerability and environmental change. School of Geography and Geosciences, University St Andrews.
- 19 **Fazey I.** (Oct 2009). Personal epistemological beliefs and teaching thinking. Interdisciplinary Teaching. University St Andrews. St Andrews.
- 18 **Fazey, I.** (Sept. 2008) Teaching Resilience Thinking. Centre for the Development of Staff and Academic Practice Aberystwyth University.
- 17 **Fazey, I.** (Apr 2008) Learning to learn for social ecological resilience and biodiversity conservation. Institute of Biological, Environmental and Rural Sciences, Aberystwyth University.
- 16 **Fazey, I.** Latham, I., Christie, M., Gamarra, J., Hagasua, E., Wagatora, D. (Apr 2008) A three-tiered learning approach to research in the Solomon Islands. Resilience 2008, Stockholm University, Sweden.
- 15 **Fazey, I.** (May 2007) Learning to learn as leverage for social-ecological resilience. Institute of Rural Sciences, Aberystwyth University.
- 14 **Fazey, I.** (Jan 2007) Teaching Thinking. Centre for the Development of Staff and Academic Practice, Aberystwyth University
- 13 **Fazey, I.** (Oct 2006) Expert knowledge and biodiversity conservation. Institute of Rural Sciences, Aberystwyth University.
- 12 **Fazey, I.** (Sept. 2006) Reinforcing feedback and adaptive governance in Kahua, Solomon Islands. Royal Geographic Society with IBG Conference, London, September 2006.
- 11 **Fazey, I.** (Apr 2004) Comparative usefulness of conservation theory. Mid-term Ph.D. seminar for CRES, ANU.
- 10 **Fazey, I.,** Wildriver, S. (Feb 2004)
- 9 **Fazey, I.** Salisbury, J.G., Lindenmayer D.B. (Dec 2003) Can conservation learn from medicine about bridging the gap between scientists and practitioners? Presentation at the Ecological Society of Australia Annual Meeting, Armidale, NSW.
- 8 **Fazey, I.** (Nov 2003) Interdisciplinary student research invited paper. The “I” word – 30 years of interdisciplinary research and education. CRES, ANU.
- 7 **Fazey I.** (Jan 2003) Validity and utility of theoretical tools in conservation biology. Introductory Ph.D. seminar for CRES, ANU.
- 6 **Fazey, I.** (June 2000) Conservation of water voles: a broad perspective. Gwynedd Council, Porthmadog, Wales.
- 5 **Fazey, I.** (July 1999 and Aug 1999) Surveying and its importance for the conservation of water voles. Gwynedd Council and the North Wales Wildlife Trust, North Wales.
- 4 **Fazey, I.** (Aug 1999) Water vole ecology and conservation. Guest lecture for the Mammal Society’s Field Identification Course at Rhyd Y Creuau, Betws y Coed.
- 3 **Fazey, I.** (Nov 1998) Calcium, nestling growth and parental care in pied flycatchers. Ecology Research Group’s Seminar Series, School of Biological Sciences, University of Wales, Bangor.
- 2 **Fazey, I.** (Nov 1997) Lemurs and Bananas: Problems encountered in the manipulation of home range in the study of the grey mouse lemur using a sugar-based resource. 9th Biennial Graduate Culterty Workshop: Ecological Experiments, Theory and Practice, University of Aberdeen.
- 1 **Fazey, I.** (Mar 1997) Effect of a sugar-based resource on the home range of *Microcebus murinus*, J.F. Miller 1777 in a dry deciduous forest in Madagascar. Scottish Conference of Animal Behaviour, St. Andrews University.

Research Supervision

- 2015- E. Carmen (Research assistant). Scottish Borders Climate Resilient Communities.
- 2015-16 H. Kent (Research assistant). Resilient businesses in Scotland.
- 2013- 15 Dr P. Moug (Research Assistant). Workshop design and proposal writing on resilience and social dimensions of environmental change;
- 2013-14 C. Lyon (Research Assistant). Learning lessons from developing community-based resilience plans. Project for the Scottish Government Resilience Division;
- 2012-13 J. Kenter (Research Assistant) BRIDGE: bridging the gap between the supply of and demand for valuation evidence (Valuing Nature Network);
- 2011-12 Dr A. Evely (Researcher) ESPPI-CREW. Reviewing research on evaluating knowledge exchange;
- 2010-11 Dr A. Evely (PDRA for ESRC grant on researching knowledge exchange) at the School of Geography and Geosciences, University St Andrews.

Knowledge Exchange and Facilitation

Expertise in designing, leading and facilitating knowledge exchange, participatory processes and workshops. These range from working with illiterate community members in developing countries through to policy experts and academics and from small workshops to major participatory processes. Includes training by L. Colbourne (2006). Key events I have designed and implemented include:

- 40. SDG Transformation Forum (Feb 2019). Co-design and facilitation of 1 day workshop to explore future directions with 40 participants after the Leverage Points Conference, Leuphana University, Luneburg, Germany.
- 39. State Agency Resilience-Building Workshop for Louisiana Government (October 2018). Co-design and co-facilitation of two day workshop to explore transformative change in the approach to the challenges facing coastal communities with senior staff of government agencies of Louisiana Government in collaboration with Centre for Planning Excellence and CSIRO, Australia
- 38. CECHR symposium (May 2018). Co-design and facilitation of interactive ideation symposium to develop project plans for 60 participants. University of Dundee, Scotland.
- 37. Seedbeds for Transformation (May 2018). Co-design and facilitation of a major two day participatory process for 300 delegates at the Future Earth supported conference in Port Elizabeth, South Africa.
- 36. Civil Society and Emergency Response: conflicting discourses of dependency and empowerment (Feb 2018). Designing and facilitating one day workshop for 40 participants. University of Dundee, Scotland.
- 35. Rising above: Adapting to land loss in the Louisiana coast (Nov 2017). Co-design and facilitation of of a two day workshop for 50 policy, practice and community members in New Orleans, in collaboration with the Centre for Planning Excellence.
- 34. Transforming knowledge production and use (Aug 2017). Designing, facilitating and coordinating a major workshop process involving 340 delegates from 35 countries with 30% non-academic in 10 parallel work groups, processing and integrating outcomes at the Transformations to Sustainability 2017 conference, University of Dundee.
- 33. Transforming professional practice for resilience (March 2017). Designing and facilitation of workshop for 30 high level resilience policy and practitioners (e.g. police, fire, voluntary sectors) for the Scottish Government Resilience Division. University of Dundee.
- 32. Integrated policies for resilience to climate change (August and September 2016). Two policy oriented workshops in a local authority and with policy makers on developing integrated policies for addressing the challenges of enhancing resilience to climate change. Scotland, UK
- 31. Emerging approaches for sustainability transformations (Oct 2016). Design and facilitation of three linked facilitated sessions at the Transformations to Sustainability 2016 Conference, Stockholm, Sweden.
- 31. Transformation research: Developing research ideas (October 2015). Design and facilitation of a workshop for the Scottish Alliance of Geoscience, Environment and Society. University of Western Scotland, Glasgow.
- 30. Scottish Borders Climate Resilient Communities (Sept 2015 - April 2016). Design and facilitation of participatory process that included nine community and multi-stakeholder workshops using diverse and flexible methods.
- 29. Wellbeing and collaborative community approaches to place-making (May 2015). Co-design and supporting facilitation of a 1 day interactive symposium with 80 academics and practitioners. University of Dundee, UK.

28. Knowledge Network for Enabling Transformation (Feb. 2015). Co-design and supporting facilitation of a 3 day meeting with 25 international academics and practitioners. Aberdour, Scotland.
27. Resilience in Scotland (Dec 2014). One day workshop with 30 academics and practitioners of resilience (e.g. Scottish Government) to enhance dialogue for enhancing resilience. Co-designed and facilitated with T. Hodgson.
26. Adaptation Pathways (July 2014). Design and facilitation of a one day workshop for 16 academics to develop research agendas and priorities in CSIRO, Canberra, Australia.
25. Sustainable Transformation, Scottish Alliance for Geoscience, Environment and Society (June 2014). Design and facilitation of a two day workshop for 20 academics across Scotland to develop project ideas and research agendas.
24. Social Dimensions of Environment, University of Dundee (May 2015). Design and facilitation of one day interdisciplinary workshop for academics across the University to enhance research project design.
23. Training in participation and facilitation for Postgraduate researchers (Oct 2013). Two day workshop, University of Dundee;
22. Back to the Future (October 2013). Designed and facilitated two days of a four day interdisciplinary workshop with 12 people. La Rochelle, France;
21. CECHR objectives workshop. Design and facilitation of a workshop for 30 people on horizon scanning and objective setting, University of Dundee.
21. BRIDGE Valuing Nature Network synthesis workshop (June 2012). One day workshop with 40 researchers, policy makers and practitioners to synthesize information from other workshops on valuing nature. London.
20. Resilience to volcanic hazards (March 2011). Two day workshop with 30 policy makers and NGO representatives in Honiara, Solomon Islands.
19. Resilience to volcanic hazards (March 2011). One day participatory event with 250 schoolchildren on Savo volcanic island, Solomon Islands.
18. Resilience to volcanic hazards in archipelago nations (February 2011). Two day participatory workshop with experts (NERC representatives, academics and policy makers) at University of Leicester.
17. Planning for the future (June 2010). Three day workshop for 80 community representatives in Kahua, Solomon Islands.
16. Learning from the past to understand future adaptation (Dec 2009). ½ day participatory workshop for 50 people for the North American Biodynamics Organisation. University of Edinburgh.
15. Project design and implementation of conservation and forest management in Kahua, Solomon Islands (June 2009). 3 Day workshop for 35 people in remote communities.
14. Embedding Social Capital in development policies and projects in Malawi (March 2009); Workshops for 25 academics and practitioners in collaboration with Bunda College, Lilongwe, Malawi.
13. Strategic management of organizations (June 2008). Assisting the Kahua Association to develop more effective strategies for managing decisions and projects.
12. Applying theory of change for strategic planning of adaptive co-management (Mar 2008). Working with the Cairngorms National Park Water Vole Conservation Project Steering Group. In conjunction with X. Lambin and Anna Evely, Aberdeen University.
11. Sharing expert knowledge of the management of UNESCO Man and Biosphere Reserves (Feb 2008). Design and facilitation of a workshop to assist the sharing of positive experiences of managers with Lisen Shultz (Stockholm Resilience Centre). Workshop was held at decadal UNESCO MAB Conference, Madrid.
10. Evaluating Biodiversity and Ecosystem Services (Jan 2008). The design and facilitation of a two-day workshop to work with ecologists and economists to begin a Delphi-type study to develop an approach to elicit public values of ecosystem services and relate these to management outcomes from Biodiversity Action Plans.
9. Participation processes in Kahua, Solomon Islands (June-Aug 2008). The design, coordination and implementation of a large scale participatory research process covering 40 communities. This culminated in a facilitated four-day workshop for 80 participants.
8. Understanding teak (July 2005). Design and implementation of workshops for local communities in the Shortlands, Solomon Islands to explain how to plant and maintain teak trees as a source of income. The workshops were held in Solomon Islands Pijin.
7. CRES Communications Workshop (Aug 2004). Design and implementation of workshop on how to capture the understanding of conservation managers, and how to help them communicate their understanding. ANU, Canberra.

- 6 Eliciting and integrating understanding of on-ground managers of the Macquarie Marshes (July 2004). Design, coordination and implementation of a workshop (with B. Newell and K. Proust) to identify key changes to the social-ecological system of the Macquarie Marshes, Quambone, N.S.W.
- 5 CRES annual staff/student two-day retreat (May 2003). Acted as overall coordinator and facilitator of key sessions.
- 4 Symposium on evidence-based environmental management (June 2002). Organisation and implementation (with J. Salisbury) of a symposium to discuss the potential application of an evidence-based approach with a group of prominent academics and environmental managers.
- 3 Postgraduate programme in environmental problem solving (Apr 2002). Design and facilitation of the workshop at the CRES annual staff/student two-day retreat.
- 2 Increasing awareness, understanding and cross-disciplinary collaboration (May 2001). Leading and running group discussions. CRES annual Staff/Student Retreat 2001.
- 1 Water vole and ecological training workshops (1998-2000). Over ten workshops designed and run for various agencies.

TEACHING

Highlights

- 14 years of undergraduate and postgraduate teaching experience;
- Strong pedagogical orientation going well beyond didactic approaches to support development in students of higher order thinking, autonomy, ability to learn how to learn, and critical thinking and analysis;
- Application of highly innovative methods, such as engaging students in implementing and learning from change projects;
- Qualifications, awards and professional recognition in teaching;
- Administration and coordination, including degree coordination, curriculum design; and design and management of complex interdisciplinary modules and programmes with large numbers of students.
- Highly experienced in pastoral care of students. This includes a GCE in Counselling Skills from Abertay University.

Pedagogy

My teaching is driven by strong ethical convictions and a desire to emancipate the ability of students to develop their own abilities and motivations to learn. This has led me to develop a teaching style that: (i) is facilitative rather than didactic; (ii) focuses on developing higher order thinking of students; (iii) recognizes all students have important contributions to make to the learning of others; (iv) actively seeks to bring together students with diverse disciplinary expertise to enhance the learning of all; (v) takes a positive reinforcement approach to encourage and motivate learning; (vi) applies best practices, such as formative assessment, handing over responsibility of teaching and learning to students (in a supportive way) and using problem based learning. Much of my teaching and learning is inspired by my own research on learning, knowing, and process for change-making and development.

Teaching Innovation

Numerous innovative approaches to teaching, many of which are embedded in more conventional systems and structures (such as teaching modules and degree programmes) and which are realistic in terms of teaching time and resources. Examples of innovations include:

- Annual Facing the Future conference series (2013-17) to support development of change making and interdisciplinary thinking skills of doctoral students (University of Dundee);

- Change-maker workshops for doctoral students, such as in facilitation, participation, knowledge exchange, social media, futures thinking (University of Dundee);
- MSc Sustainability programme design, which builds on existing modules but also shifts emphasis towards developing students abilities to identify and implement solutions, as well as identify problems (University of Dundee);
- Transformation in Practice MSc module, focusing on teaching solution oriented skills, from facilitation, futures thinking and wisdom based decision-making (University of Dundee);
- Group Chang-making assignments as part of MSc Training. Past groups have worked on projects on bee conservation, reducing waste, persuading institutions to divest from fossil fuels, and supporting shifts to reduce meat consumption (University of Dundee);
- Reflective assignments for MSc Training, taught using deep-analysis methods to elicit higher order thinking assumptions. Students are required to assess how their experiences of change have affected their thinking about change, thinking and sustainability (University of Dundee);
- Group, problem based assignments for MSc Training to design future urban environments, based on site visits and real world issues (University of Dundee);
- Reflexive processes for developing higher order epistemological beliefs using resilience thinking and problem based learning with final year undergraduates, with reports written as research papers (University of Aberystwyth and Dundee);
- Teaching climate negotiation skills with 160 first year undergraduates through workshops (University of Dundee);
- Teaching behavior change to 250 1st year students which were required to assess their carbon emissions, develop, implement and evaluate plans to reduce them (University of St Andrews);
- Concept mapping on problem based issues with 350 1st year students to engage them in understanding dynamics of complex issues, integrate knowledge from research papers and develop new cognitive skills (University of St Andrews).

Teaching Qualifications and Awards

- 2017 Nominated for teaching award, University of Dundee
- 2015 Nominated for teaching award, University of Dundee
- 2016 Graduate Certificate of Education in Counselling Skills, Abertay University (relevant to pastoral care)
- 2011 Nominated for teaching award, University of St Andrews.
- 2009- Fellow of the Higher Education Academy.
- 2009 Teaching Excellence Award, Aberystwyth University.
- 2008 Postgraduate Certificate in Teaching in Higher Education (PGCTHE), Aberystwyth University.
- 2000 Training course “Teaching in Higher Education” provided by the University of Wales Bangor.

Doctoral Student Supervision

Actively supervising and collaborating with students working on a range of environment-development issues in UK and international contexts:

- 2017- Lee Eyre. Metaphors for transformative change.
- 2017- Douglas Taylor. Social licence for renewable energy. PhD Candidate, Dundee.
- 2016- Laura Donkers. Artistic methods for community food projects. PhD Candidate, Dundee.
- 2016- Jade Cawthray. Co-creating citizen science. PhD Candidate, Dundee
- 2016- Cathel Hutchison. Ecological design of green infrastructure. PhD candidate, Dundee.
- 2016- Esther Carmen. Social capital and Resilience. PhD candidate, Dundee.
- 2016- Glenn Page: Governance baselines and development evaluation. PhD candidate, Dundee
- 2013- Jennifer Williams. Learning and resilience. University of Dundee.
- 2014-17 Sami Alazemi Co-Creating Curricula: An Ecological view of Interior Design A Case study of Design Education in Kuwait, University of Dundee.

- 2013-17 Chris Lyon. Resilience and Social Power, University of Dundee.
- 2013-17 Friederike Mikulcak. Institutional arrangements in Transylvanian agricultural systems. PhD candidate based at Leuphana University, Germany.
- 2011-14 Andra Ioana Milcu. Land use history and cultural ecosystem services in Transylvanian agricultural systems. PhD candidate based at Leuphana University, Germany.
- 2010-14 Tamara Davies. Relationships between biodiversity, ecosystem services and poverty in the Solomon Islands. PhD candidate based at University of St Andrews.
- 2011-14 Jasper Kenter. Valuing ecosystem services. PhD candidate based at University of Aberdeen.
- 2007-09 Trevlyn Webb. Wildlife as a tool for development in rural areas of countries with emerging economies. Completed MPhil at Aberystwyth University
- 2007-10 Anna Evely. Motivations of volunteer involvement in an interdisciplinary adaptive co-management project to eradicate mink in the Cairngorm Mountains National Park, Scotland. Ph.D. candidate based at the University of Aberdeen. Now working as a PDRA at St Andrews.
- 2006-10 Elizabeth Conrad. Capturing social and cultural value of landscapes in Malta. Ph.D. candidate based at Aberystwyth University. Now working as research active lecturer in Malta University.
- 2006-10 Joseph Dzanja. The influence of social capital on economic livelihoods in Malawi. Ph.D. candidate, Aberystwyth University. Now works as Lecturer at Bunda Agricultural College, Malawi.
- 2007-09 Ben Tantua. Participation, oil, conflict and development in Nigeria. Completed M.Phil.

Doctoral Student Training

- 2013-2017 Founder, supporter and convener of the student led Facing the Future Conference Series, which has been professionally facilitated with support from the International Futures Forum and University of the Third Horizon and which seeks to help students develop high level skills in change-making and interdisciplinary thinking. Supported by the University of Dundee.
- 2013-2017 Change-maker workshops to train doctoral students in diverse change-making skills, such as facilitation, futures thinking, design, knowledge exchange. University of Dundee.

External Examination

- 2013-17 External examiner for MSc Environmental Sustainability, University of Edinburgh.
- 2007- External Examiner for PhD: University of Aberdeen, 2008, University of Armidale, 2008, University of Aberdeen 2011, Australian National University 2013, Robert Gordon's University 2014, University of Leeds 2015; University of Southern Queensland 2015; Abertay University 2015; Exeter University 2016; University of Bangor 2016; University of Edinburgh 2017, University of Aberdeen 2018.
- 2012-2014 External examiner for Masters Theses at the University of Malta.
- 2010 External Examiner for The Fenner School of Environment and Society, Australian National University Honours theses;

Teaching Roles and Responsibilities

University of Dundee

- 2016- Programme lead for the interdisciplinary MSc in Sustainability;
- 2016- Module coordinator of Transformations in Practice (core module for MSc sustainability);
- 2016- Contributions to various master level teaching on the MSc Sustainability programme;
- 2015- Module Coordinator Social Resilience Honours module (35 students) for Geography MA/BSc
- 2013-15 Shared teaching on 'Social Impacts and populations', MSc Water hazards, risk and resilience.
- 2013- 1st Year lectures and workshops on 'A world in crisis' (150 students). Geography MA/ BSc.
- 2013- BSc, MA, and MSc dissertation supervision (5-10 students per year).

University of St Andrews

Teaching, coordination, leadership and administration on the University of St Andrews' award winning interdisciplinary undergraduate and M.Sc. course in Sustainable Development. Significant role in curriculum development and coordination including the following responsibilities:

Key responsibilities:

- 2012-13 Degree Coordinator for the MA/BSc Sustainable Development undergraduate programme
- 2012-13 Honours advisor for 35 students (see below);
- 2011-12 Deputy Sustainable Development Degree Coordination. Includes strategy and curriculum development, liaison between Schools, and acting coordinator when main coordinator is absent;
- 2010-13 1st year coordinator: Managing all activities associated with the first year, including coordination of two interdisciplinary 1st year modules (average 180 students). This is a complex administrative task requiring liaison with contributors from 11 other schools and managing and mentoring a team of postgraduate tutors;
- 2011-12 Honours Advisor for Sustainable Development. Advising 85 Sustainable Development 3rd and 4th year students in academic matters, having responsibility at the programme/school level to ensure students meet degree regulations and for ensuring consistency across university degree programmes for sustainable development students. This is a major administration task as students of Sustainable Development take modules from 11 other schools.
- 2010-11 Subhonours advising. Advising 48 1st and 2nd year students in academic matters.
- 2009-10 Second year coordinator: Teaching on and managing Second year modules in Sustainable Development.

Teaching in 2010-12

	Level	Responsibilities
Sustainable Development : Priorities and Pathways	1 st Year	Design and coordination of interdisciplinary, cross school module with 170 students. Includes managing and delivering generic assignment on integration.
Sustainable Development: Towards sustainable futures	1 st Year	Design and coordination of interdisciplinary, cross school module with 200 students. Includes managing and delivering generic assignment on behavior change.
Sustainable Development	M.Sc.	Delivering lectures on resilience and environmental change (30 students)
Sustainable Design	4 th Year Hons	Delivering suite of lectures and workshops and assessment on a case study of biodiversity and conservation through participatory action and assisting with the running of the Sustainable Development field course (45 students).
Review essay and methods	3 rd Year Hons	Supervising 5 students per year for extended essay. Delivering lectures on methods. Responsibility for teaching and reviewing ethics applications from students.
Sustainable Development	2 nd year	Coordinating module in 2009/10. Delivering lectures and assessment (2010/11)
Dissertation supervision	4 th year Hons and M.Sc.	Supervision of around 5 students per year.

Aberystwyth University

Key responsibilities

- 2007-09 Curriculum development (e.g. Tourism Management and Countryside Management).
- 2006-09 Design, teaching and responsibility of modules relating to development, conservation and sustainability.
- 2006-09 Tutoring 30 undergraduate students per year.
- 2007-09 Responsibility for social science methods training.

2006-09 Developing and coordinating modules (including overseas filed course) over all undergraduate years.

Teaching (2008-09)

	Level	Description	Responsibilities
Sustainable Societies	B.Sc. 3 rd year	Resilience and systems thinking	Module design, coordinator and only tutor (20 students)
Sustainable Rural Communities	B.Sc. 2 nd year, HND 2 nd year	Participation and integrated sustainable rural development	Module design, coordinator and only tutor (25 students)
International Tourism in Practice	B.Sc. 2 nd year, HND 2 nd year	Study tour to Malta teaching social science quantitative and qualitative research techniques	Module design, coordinator, taught with one other tutor (15 students)
Integrated Rural Development	B.Sc. 3 rd year	Techniques for integration using problem-based learning with simulated real-life research contracts	Joint responsibility with one other tutor (15 students)
People and the Countryside	B.Sc. 1 st year, HND 2 nd year	Introduction to institutions and development	Joint responsibility with two other tutors (60 students)
Tourism and Recreation in the U.K.	B.Sc. 1 st year, HND 1 st year	Introductory module	Joint responsibility with one other tutor (50 students)
Research Methods	B.Sc. 2 nd year	Social science and science research methods for wide variety of students	Individual lectures and support in workshops (50 students)
Countryside Management in Practice	B.Sc. 3 rd year	Ecosystem services and multi-functional landscapes	Running workshops and field visits (40 students)
Supervision of undergraduate dissertations			18 students over 3 years

REFEREES

Professor Dame Sue Black, Pro Vice-Chancellor for Engagement. Lancaster University, Lancaster, LA1 4YW, United Kingdom Email: sue.black@lancaster.ac.uk

Professor Stephen Dovers, Fenner School of Environment and Society, Australian National University, Canberra, ACT 0200, Australia. Tel: +61(0)2 612 50669; Email: Stephen.Dovers@anu.edu.au

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