

**Impact case study (REF3b)**

<p><b>Institution:</b> Birmingham City University</p>
<p><b>Unit of Assessment:</b> 16 Architecture, Built Environment and Planning</p>
<p><b>Title of case study:</b> Fusing Spatial Planning with the Ecosystem Approach: Providing Operational Tools for Improved Decision Making across Built and Natural Environments</p>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>This case study is built upon the successful fusion of Spatial Planning with the Ecosystem Approach, translating complex theory into operational outputs for public and stakeholder engagement, which improve policy processes and outcomes across built and natural environments and fringe interfaces. ‘RUFopoly’ and ‘EATME tree’ are co-produced outputs, maximising engagement in learning spaces within game and web-portal formats respectively. For example, the Welsh Government has used both tools to design emerging policy frameworks (testimonial1). The novel research model employed builds research teams that integrate academic, policy and practice participants within a collective journey of (re)-discovery maximising reflective practice and social learning.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Research on the rural-urban fringe (RUF) builds on CESR’s expertise in fringe governance. Larkham and Morton’s (1996-2004) work on the evolution, form and function of fringe belts identified the need for more diverse and flexible planning interventions, supporting the needs of local communities and their environment.</p> <p><b>Scott’s</b> RELU-funded research (2010-2012) advances this work within a more holistic treatment of RUF character and potential. Although the RUF now represents the dominant UK space (Scott, 4), this research exposes its ‘forgotten’ nature; lacking pro-active and dedicated policy interventions. This becomes urgent given contemporary planning policy and growth debates which position the RUF as a ‘battleground’ within which new housing and infrastructure developments are contested, rather than set within more shared visions of the kind of RUF places and environments public(s) want.</p> <p>This reactive interface between built and natural environments is typified by policy ‘disintegration’, where interventions are based on different paradigms, governance, scales and tools (Scott, 1). These readily conflict: for example policy agendas built on localism (built environment) versus landscape-scale approaches (natural environment). Our research deconstructs this policy ‘disintegration’ through narratives revealing how natural and built environment interests coincide and conflict within the same geographical space. The research then shows how through the intersection of spatial planning (SP) and the ecosystem approach (EA), alternative narratives maximising connectivity, long-termism and values, can help supersede traditional silos and administrative boundaries, creating multiple benefits (see section 3 citations).</p> <p>The integration of EA and SP paradigms fills a research and policy void. Using a research model involving a transdisciplinary research team that crosses academic, policy and practice boundaries, enables co-production and social learning to shape the research ‘journey’, improving collaboration across and within research-policy-practice domains. The resultant conceptual framework champions more accessible end-user ‘lenses’ of ‘values’, ‘time’ and ‘connections’ through which RUF futures can be co-developed. By re-interpreting complex concepts (EA and SP), we engineered new pathways across disciplinary and professional silos, maximizing the potential for positive public engagement as exemplified in our RUFopoly game (section 4; <a href="http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/rufopoly">http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/rufopoly</a>).</p> <p>CESR’s expertise at the RUF research and policy interface secured <b>Scott’s</b> leadership in a Defra and Research Councils’ UK (RCUK) funded project (UK National Ecosystem Assessment (NEA) Follow On) that mainstreams the NEA Ecosystem Assessment (2011) within an operational tools framework. The resulting ‘Ecosystem Approach Toolkit: Mainstreaming the Environment’ (<b>EATME</b>: <a href="http://www.eatme-tree.org.uk">http://www.eatme-tree.org.uk</a>), provides an accessible web portal within which users</p>

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navigate through a policy cycle (Ideas-Survey-Assess-Plan-Act-Evaluate). Each stage has guidance adapted from the 12 principles of the EA and selected case study experiences, which then signposts the most appropriate policy and decision-support tools to use. Our EA toolkit consists of tools (regulatory, incentive, valuation, futures and ecosystem services) that were co-selected on their policy impact and suitability for incorporation within an Ecosystem Services Framework. We then subjected each tool to a bespoke ecosystem-proofing process with accompanying guidance. EATME is thus designed to mainstream nature into policy, projects, plans or programmes and is built on our transdisciplinary research model to maximise research and policy impact.

### 3. References to the research (indicative maximum of six references)

#### Academic Papers (CESR/BCU staff are in bold; all papers are available in REF2)

1. **Scott, A.J.** (2011) Beyond the conventional: meeting the challenges of landscape governance within the European Landscape Convention, *Journal of Environmental Management* 92: 2754–2762
2. McMorran, R., **Scott, A.J.** (2013) Reconstructing sustainability; participant experiences of community land tenure in North West Scotland, *Journal of Rural Studies* <http://dx.doi.org/10.1016/j.jrurstud.2013.10.006>
3. **Scott A.J., Carter, C.**, White V., Brown, K. (2009) Seeing is not everything: exploring the landscape experiences of different publics, *Landscape Research* 34: 397-424
4. **Scott, A.J., Carter, C.E., Larkham, P., Reed, M.S., Morton, N., Waters, R., Adams, D., Collier, D., Crean, C., Curzon, R., Forster, R., Gibbs, P., Grayson, N., Hardman, M., Hearle, A., Jarvis, D., Kennet, M. Leach, K., Middleton, M., Schiessel, N., Stonyer, B., Coles, R.** (2013) 'Disintegrated Development at the Rural Urban Fringe: Re-connecting spatial planning theory and practice', *Progress in Planning* 83 1-52

#### Policy Papers (CESR/BCU staff are in bold)

1. **Carter, C., Scott, A.J.** (2011) Spatial planning – new opportunities for environmental governance, *Government Gazette* October: 46-47
2. **Scott, A.J., Carter, C.** (2012) Planning on the edge, *Green Places* May: 17-20
3. **Scott, A.J.**, Liddon, A. (2012) Playing around in the rural urban fringe, *Government Gazette* October: 56
4. **Scott, A.J.** (2012) Exposing, Exploring and Navigating the built and natural divide in public policy and planning. In *Practice*, March Institute of Ecology and Environmental Management, pp. 20-23
5. **Scott, A.J.** (2013) Re-thinking English Planning: Managing Conflicts and Opportunities at the Urban Rural Fringe. In Blackman-Woods, R. (2013) ed. *New Directions in Planning: beyond Localism* (Chapter 5)

#### Funding

RELU (2011-2012): Managing Environmental Change at the Fringe: Reconnecting Science and Policy with the Rural-Urban Fringe (£145K)

UK National Ecosystem Assessment Follow On (2012-2013): Tools: Applications, Benefits and Limitations for Ecosystems (TABLES) (£200K)

### 4. Details of the impact (indicative maximum 750 words)

This case study provides theoretical and policy fusions between SP and EA translating complex science into accessible and operational decision-support tools (RUFopoly and EATME) that enable different public(s) audiences to engage with complex planning issues. Due to the co-production research model used, policy and practice team members use these tools to shape their ongoing national, regional and local planning processes and outputs, and individual behaviours.

RUFopoly is an interactive learning game set within a fictitious RUF that requires players to engage with issues that were experienced within our RUF project. Using a 28 square board format divided into questions addressing 'SP and EA', 'values', 'connections' and 'time', players make a collective journey, answering questions determined by the throw of a die. Answers are discussed,

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recorded and justified leading to visions based on previous justifications promoting reflexivity and social learning. “*RUFopoly provided an innovative way of discussing key issues*”, said Birmingham City Council’s Head of Planning.

The game has now been played and used as part of strategy formation by Government (Welsh Government: Natural Resource Management Programme), Business (Greater Birmingham and Solihull LEP: (<http://centrefenterprise.com/wp-content/uploads/2013/01/GBSLEP-SSFP-Worcestershire1.pdf>), to help Councillors in plan development (Politicians in Planning Network; Staffordshire County Council) and support GCSE and A Level curricula within six school workshops (Queen Mary Grammar School Walsall), championed by the Geographical Association ([http://www.geography.org.uk/download/GA\\_1119RUFopoly.doc](http://www.geography.org.uk/download/GA_1119RUFopoly.doc)) and ESRC (<http://www.socialscienceforschools.org.uk/news/blog-2013/July-2013.aspx>). One teacher Kirsty Mitchell commented “*it has some good links with the course and is useful in terms of decision making for their year 13 exams*”.

It has been recognized as an exemplar for adaptive management and social learning within RCUK’s Living With Environmental Change partnership (<http://www.lwec.org.uk/supporting-journey-adaptation>), ESRC (<http://www.esrc.ac.uk/news-and-events/features-casestudies/features/26803/land-management-at-the-roll-of-a-dice.aspx>) and has enabled people to engage explicitly with environmental change agendas; nationally, through the Sustainable Development Commission’s ‘Games to Save the Planet’ project (<http://ecoactiongames.org.uk/live/wp-content/uploads/fun-games-post-event-report.pdf>) and internationally through RCUK funded Humanitarian Futures Programme (<http://www.elrha.org/dialogues/case-studies/case-study-25-board-games>).

Its flexible format makes it well suited to international application. The Rural Futures Institute Nebraska worked with **Scott** to develop ‘Plainsopoly’; also, funding has been secured for a Swedish version. Its unique impact has been recognized in the Observer (<http://www.guardian.co.uk/environment/2011/dec/11/lucy-siegle-childrens-board-games>).

The EATME tree builds on the RUF project via the creation of an accessible web platform that mainstreams the value of nature in policy and decision-making processes, allowing users to apply various policy tools within particular contexts (plans, policies or programmes) and guidance from the ecosystem approach. The Natural Resource Use Advisor of Natural Resources Wales (NRW) states that, “*Alister has succeeded in putting the ecosystem approach into practice*”. EATME is being developed and tested simultaneously with the project co-investigators involving academic, policy and practice participants. For example, Welsh Government and NRW are using EATME within their policy frameworks. As the Natural Resource Use Advisor to Natural Resources Wales states, “*So whilst our framework is operational guidance, it currently lacks tools and it is here that the EATME tree provides an accessible web portal for our staff*”.

A significant aspect of the research impact from both outputs derives from the way the research process was orchestrated to incorporate stakeholders as full team members, engaged actively in co-producing knowledge. The former Chair of the Rural Working Party for OECD, a member of our EATME team, states “... *it can secure much greater impact by drawing on the different experiences and professional background of a diverse team*”... “*This is the way to spread knowledge of research – communicating through the team members.*” This also leads directly to active changes in the way team members work and has influenced processes in host organizations. Natural England’s Head of Profession: Ecosystem Approach, states, “*I was impressed by Alister’s leadership and innovation... RUFopoly as a learning tool helps people engage with complex issues ... “a tool we have used in our own staff development sessions.*” Furthermore the Rural Affairs Director at the National Farmers Union, following a visit to Malmo to play RUFopoly, has set up a new collaboration with Swedish dairy farmers looking at how to maximize RUF benefits.

This case study challenges traditional approaches to policy and decision-making and research outputs. Research team members have worked with **Scott** on both academic and policy outputs including the *Progress in Planning* Paper. **Scott** is also extending the research into professional and practice domains; e.g. June/July RICS *Property Journal* 2013; and as a member of the RTPI [Planning Practice and Research Committee](#). Additionally, the RUF project has been shortlisted for the RTPI award for excellence in spatial planning research 2013. RTPI’s Head of Policy states, the “*project(s) reported here provide a new impetus for spatial planning... It is vital for the future of the profession that grounded, innovative research that meets the needs of planning*”

*policy and practice continues”.*

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

Testimonials (available on request):

1. Head of Ecosystem Management and Implementation, Natural Resource Management Programme, Welsh Government (to corroborate the contribution of EATME tree to policy development in the Welsh Government)
2. Cyngorydd Defnydd Adnodd Naturiol/Natural Resource Use Advisor, Cyfoeth Naturiol Cymru /Natural Resources Wales Natural Resources Wales (to corroborate the application of the EATME Tree in Natural Resources Wales)
3. Head of Planning & Growth Strategy Birmingham City Council (to corroborate the role that RUFopoly played in the development of the GBSLEP)
4. Head of Policy, Chair, RTPi West Midlands (as assessor of award of 2012 West Midlands RTPi Planning Leaders Award to Alister Scott, related to this research)
5. Head of Profession for the Ecosystem Approach, Natural England (member of case study research teams for RELU and National Ecosystem Assessment projects)

Other references:

- To access the EATME Tree, visit: <http://www.eatme-tree.org.uk>
- To access web links showing how RUFopoly has been used to inform decision-making in a range of contexts, visit: <http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/rufopoly>