Final Report: Managing Environmental Change at the Rural Urban Fringe

1. Background

This research project rediscovers the opportunity space within the rural-urban fringe (RUF); an arena within which we rejuvenate theory and practice at the interface of spatial planning (SP) and the ecosystem approach (EA) (Harris and Tewdwr-Jones, 2011). Our starting proposition is that the RUF is a neglected and complex space, needing more attention as a place in its own right (Gallent et al., 2004; Qviström, 2007). Academic and policy concern needs to move away from its predilection on urban or rural matters with greenbelt, urban containment and regeneration issues dominating debates in favour of more holistic approaches that treat the RUF in its entirety, re-connecting economic, social and environmental realms (Pryor, 1968; Countryside Agency and Groundwork Trust; 2004; 2005). Two contemporary frameworks intersect here, providing a lens within which to unpack the RUF. First, the planning lens is articulated through SP (Tewdwr-Jones et al., 2010); whilst the environmental lens champions the EA (UNCBD, 2010; NEA, 2011). This separate evolution has spawned particular institutional landscapes and practices shaping a significant environment-planning divide (Scott, 2012). Consequentially, the RUF, the space where town meets countryside, is characterised by an increasingly fragmented institutional landscape where uncertainty and conflict predominate (Rauws and De Roo, 2011; Scott et al., 2008). However, many definitions of the RUF fail to capture this inherent messiness, when landform and land use are key indicators. It is only when values become part of the definitional mix that the full spatial extent and impact of the RUF’s influence begins to emerge (Phillips, 2010). Indeed, Mackenzie (1997) claims that the RUF now represents one of the dominant spaces of the contemporary landscape. In England this becomes particularly salient given recent planning reforms and increasing public and political debate on the future RUF at a time of great economic and environmental uncertainty (DCLG, 2012).

We confront this management challenge directly through the adoption of a transdisciplinary approach, working across many of the established boundaries that often restrict progress in theory and practice: academic-policy; natural-social sciences; national-local scales and policy-policy sectors. We view the RUF as a classic opportunity space but have to counter the prevailing negative vocabulary spawned from ‘fringe’; it is often associated with sprawl, marginalisation and depression, resulting in under-valuation of the resources and opportunities within these areas. However, as an ‘edge’, it can equally represent dynamic, diverse, valuable and positive spaces, with significant and flexible potential (Qviström, 2007). Within this research, the RUF represents a microcosm for testing more holistic approaches to environmental planning and management using relatively untapped synergies between the EA and SP (Harris and Tewdwr-Jones, 2010; Opdam et al., 2002).

2. Objectives

2.1 To re-connect with the RUF from rural/urban and natural/social sciences’ perspectives to inform future research and policy agendas.

This objective was fully met using all research team members’ reflective thought-pieces and academic literature reviews. These separate contributions were then synthesized into
a position paper which collectively shaped our interdisciplinary approach (lens) within which we could unpack the RUF. Our three cross-cutting themes; connections, time and values have interfaced positively with other policy and research agendas (e.g. VNN Bridge; National Ecosystem Follow on Project and Ecosystem Knowledge Network). Our video policy briefs (http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/policy-briefs) and Rufopoly (http://www.bcu.ac.uk/rufopoly) represent core outputs achieving this objective.

2.2 To understand the possible impact of environmental change on the RUF
This objective was modified and fully met. Early on, the research team considered it necessary to pursue a holistic agenda in assessing drivers of change in the RUF in order to maximise policy impact and outcomes. This premise was embedded within our conceptual framework, subsequent workshops and visioning exercises and was crucial in engaging stakeholders across economic, social, community and environmental realms within which RUF change was assessed. Specifically, three workshops focused explicitly on the environmental change agenda (Table 1).

2.3 To develop a theoretical approach informed by the synthesis of spatial planning and ecosystem management paradigms within effective interdisciplinary academic and policy stakeholder networks across the natural and social and rural and urban divides.
This objective was fully met with the development of our conceptual framework fusing ideas from the EA and SP (see Figure 2). This framework has featured in several policy and practice papers with a dedicated video policy brief (Scott, 2012; Scott et al. 2012b; Scott et al., 2012 under review a).

2.4 To identify pro-actively the generic and specific challenges facing the RUF utilising and synthesizing best available expert and community knowledge(s) and information of environmental and societal change agendas.
This objective was fully met through the development of eight member-led workshops and two visioning exercises. Audiences were selected that cut across the economic, social and environmental agendas, going beyond the usual suspects. Crucial here was the specific targeting of themed workshops to attract different audiences (Table 1: Appendix D). In the latter stages of the research this was augmented by the power of Rufopoly as an engagement tool involving rural professionals, decision makers and community groups (http://www.bcu.ac.uk/rufopoly).

2.5 To work effectively as a combined academic and policy stakeholder team to apply the research at strategic and local scales including selected and themed case studies of RUF planning and management under different drivers of environmental change.
This objective was fully met within a co-production ethos. The visioning case studies of Hampton (local scale) and North Worcester (landscape scale) covered multi-scalar perspectives incorporating direct knowledge, networks and experience of our team members with the eight workshops specifically targeted around identified drivers of change (Table 1).

2.6 To provide a deliberative, participatory and reflexive approach to the research whereby academics, policy and community stakeholders are embedded in all stages of the research
process, sharing knowledge, experiences and expertise, thereby maximising the potential for effective social learning outcomes through established or new interdisciplinary networks.

**This objective was fully met.** The development and management of a transdisciplinary team crossing academic, policy and practice boundaries secured strong buy-in to the project. The use of a paid consultant status was crucial in maintaining peoples’ commitment at a time of huge change in agency funding and workloads. The project management allowed an organic and consensual approach to inform the methodological development using thought-pieces, reflective practice and synthesis documents as tools to create significant and positive changes in research direction which ultimately produced highly successful outcomes. A consistent theme in the research emerged stressing the importance of taking risks by going out of established comfort zones. Specifically:-

- Challenging project communication via Sharepoint platform. The project management allowed a critical discussion space enabling people to freely express concerns.
- The establishment of themed workshops to tackle RUF issues using member networks enhanced the evidence within the research and effectively and efficiently utilised member networks and expertise.
- Video policy briefs challenged all the team to work, produce and present material outside usual practice and experience.
- The Rufopoly tool, originally developed as a conference display, built our interdisciplinary framework explicitly into a game format and provided an opportunity for participant engagement in a fun but informative setting. Crucially, this novel output has exceeded all expectation as it translates our research into a simple but effective tool.

2.7 To enable all research participants to translate their experiences into changing working practices through their own work roles and to provide 'living' exemplars for interdisciplinary research and policy activity.

**This objective has been met** but will achieve more with a further survey in 5 years’ time. The following examples illustrate emerging evidence of substantive culture and behaviour change as reported by project participants themselves.

- Adoption of more effective writing skills (academics in terms of practice-oriented writing and practitioners in terms of academic rigour and providing evidence). Overall several team members commented of how they have become more creative and confident through having stepped out of their comfort zone in terms of collaborators, topics, approaches and methods (e.g. Collier co-writing and presenting an academic paper in Holland, May 2012).
- Embracing wider literature, broadening consideration of topics and using better evidence in teaching and practice - helped by the ability to draw on synthesised and newly-produced RUF evidence (e.g. Reed and Curzon in their postgraduate teaching).
- Reflection on teaching approach, incorporating the EA directly into planning curricula and drawing on research participants as guest speakers (e.g. Carter, Curzon and Scott in their undergraduate and postgraduate teaching); co-production and social learning by involving students in research and
dissemination activities (especially Curzon training students to facilitate Rufopoly and supporting the project conference, 29 February 2012).

- Working with different disciplines more closely now (this has provided ideas for new projects (e.g. 9-piece Jigsaw KE bid to ESRC; Collier working with Friends of the Earth and Localise West Midlands).

This change and adoption of more interdisciplinary ideas and practices partly resulted from the personal gains individual participants acquired from the project including:

- Direct experience of interdisciplinary/different working (genuine teamwork, improved professional network and joint output creation);
- Intellectual stimulation, opening of eyes to new/neglected area;
- Improved knowledge and understanding of ‘new’ concepts and some topics/areas of work (RUF; ecosystem approach; spatial planning);
- New ideas and ways of communicating (video briefs; Rufopoly);
- Thinking was challenged and developed (e.g. regarding green belt);
- ‘Rationale’/need for early stakeholder engagement;
- Experience/realisation that this kind of research can actually influence positive changes within own profession and public policy.

3. Methodology
The complexity of RUF space presented a significant theoretical, policy and practice methodological challenge. Our response is depicted in Figure 1.

A transdisciplinary approach was adopted allowing the integration of different academic and non-academic perspectives in one research team. Here, both academic and non-academic practitioners crossed traditional boundaries of practice; natural versus social sciences; academic versus practice; national versus regional versus local scales; built environment versus natural environment; public versus private versus voluntary; and sector versus sector. The team was selected based on a combination of influential organisations and individual recommendations. Recruitment was by letter and telephone conversation and significantly, with one exception, did not involve individuals with whom the PI had previously collaborated.

The project involved five iterative phases:-

a. Members of the team produced separate reflective papers based on their expertise and experiences on SP and/or EA. These were then integrated within conventional literature reviews and state of knowledge assessments as internal working papers.

b. The process was then repeated for the RUF.

c. The PI synthesized these ‘thought-pieces’ into one coherent position paper outlining alternative courses of action. Subsequent team discussions led to the joint identification and prioritisation of cross-cutting themes. Eventually three were chosen (connections, time and values) on account of their overall importance, challenges for policy and practice, and project resource limitations. Crucially, these ‘simple’ (though conceptually rich) themes were seen as helping to translate the abstract ideas of SP and EA into more accessible and intelligible language to aid both decision-makers and the public to start crossing the planning-environment divide (Scott, 2012).

d. Each theme was unpacked within the RUF using this new interdisciplinary ‘lens’ through two primary research activities. First, using the networks of selected research team members, eight themed workshops were held involving over 250 participants across economic, environmental and social realms and involving professional and lay publics (Table 1: Appendix A). The workshops were identified as constituent parts of a comprehensive assessment of RUF issues. A team member led and adapted the workshop(s) title and format according to their networks. This maximised attendance and expertise. Most workshop sessions (with 2 exceptions) were taped, transcribed and subjected to simple contents analyses. A summary report was then produced and circulated to participants. The second activity involved two field-based visioning exercises in the RUF, adapting a method pioneered by Scott et al. (2009b). The case studies reflected different scales and foci of the RUF. Hampton provided a local scale urban-rural focus as a settlement extension of Peterborough, a mixed housing and employment development of about 5600 inhabitants on a mainly brownfield site. The master plan (1991) and associated delivery plan was managed by one of our research team members giving us unique access and insights. North Worcestershire involved a landscape-scale RUF focus.
Five team members performed their day-to-day job in this area and it was also subject to an innovative Green Infrastructure project overseen by one team member.

In both cases participants undertook a pre-planned journey across the RUF involving three viewpoints. The participants (Appendix D) were selected purposively across business, community, environment and economic sectors drawing on key contacts from within the research team, whilst the three viewpoints were selected using the concept of a transect (a zone of interest moving out from an urban edge to a rural hinterland where RUF diversity was maximised). In North Worcestershire we used a composite map of environmental character areas from work within the Worcestershire Green Infrastructure Partnership (2011), whilst in Hampton the master plan consultants identified a suitable transect across the site. From the resulting intelligence specific viewpoints were then identified by the research team with respect to health and safety, access and view line. The visioning exercises took place on the 18th (Hampton 10 participants) and 19th (Worcestershire 15 participants) July 2011 from 12.30 to 17:00; a half-day format was chosen to maximise the number of respondents. The format for the afternoon was replicated across the two areas with the hiring of a function room as a base; lunch involving a project briefing, a drive to viewpoints; facilitated and taped discussion within smaller groups at each viewpoint; self-written participant comments via a notepad to record all points made in and outwith the viewpoints; a tea and debrief on return. All this material informed a summary report which was e-mailed to participants with one final request for feedback from post-visit reflection.

Table 1: Workshops on the RUF, 2011-2012

<table>
<thead>
<tr>
<th>Workshop Title</th>
<th>Host</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving decision-making for the sustainable management of the rural urban fringe</td>
<td>West Midlands Rural Affairs Forum</td>
<td>25</td>
</tr>
<tr>
<td>Long-termism/values in the built environment: rural urban fringe and land use</td>
<td>Green Economics Institute</td>
<td>65</td>
</tr>
<tr>
<td>Bridging the rural urban divide through green economic opportunities</td>
<td>Birmingham Environmental Partnership</td>
<td>88</td>
</tr>
<tr>
<td>Local needs with local resources in the rural urban fringe</td>
<td>Localise West Midlands</td>
<td>15</td>
</tr>
<tr>
<td>Leaning the lessons from strategic planning: resurrecting institutional memories</td>
<td>Birmingham City University</td>
<td>14</td>
</tr>
<tr>
<td>Values and decision-making</td>
<td>Forest Research</td>
<td>8</td>
</tr>
<tr>
<td>*Sustainable urban futures</td>
<td>Birmingham Institute of Art and Design</td>
<td>12</td>
</tr>
<tr>
<td>*Climate change and the 9-piece jigsaw</td>
<td>Birmingham City Council</td>
<td>8</td>
</tr>
</tbody>
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* No taping undertaken due to nature of exercise (documents were produced).

e. Finally, the material collected through all previous phases was adapted and translated by the team into a five video policy briefs (http://www.bcu.ac.uk/research/-centres-of-excellence/centre-for-environment-and-society/projects/relu/policy-briefs) and an interactive learning tool (Rufopoly http://www.bcu.ac.uk/rufopoly) allowing publics to develop their own individual visions for Rufshire.

1 The RUF transect suggestion came from a meeting of Defra and CLG officials as part of the PI's RELU work-shadowing scheme.
Interdisciplinarity was embedded within the project design. The novel fusion of SP and EA frameworks produced a conceptual approach (Figure 2) from which the research proceeded. We argue that developing the interdisciplinary ‘lens’ from the outset provides a more robust approach and supersedes the weaker parallel interdisciplinary model which integrates research findings at the end of the process (Tress et al., 2005). Furthermore, by developing a unified research team that crossed traditional natural and social science boundaries in academia, policy and practice, a transdisciplinary research model was championed which has developed an enduring quality as further projects and initiatives emerge from it.

The management process was based on co-production which enabled the research process to evolve in a deliberative manner; effectively “making it up as we went along” set within our a priori conceptual framework (Scott et al., 2012b). The role of the PI was crucial as a catalyst and acting as the conduit within which the interdisciplinarity was managed and achieved. This was pragmatic in that team members had limited time to devote to the project.

The interdisciplinary work is demonstrated in the core outputs (Video policy briefs and Rufopoly). Furthermore, three key papers (Scott and Carter, 2012; Scott, 2012; Scott and Carter, 2011) stress the key problems of the planning-environment divide and present our novel interdisciplinary framework as a solution to allow more joined-up planning. This is highlighted graphically in our video policy brief on reconnecting the built and natural environment divide in the RUF (Scott et al., 2012b).

5. Results

5.1. The RUF needs to be re-positioned as an opportunity space based on assessments of the needs of the people, place and environment within the RUF itself
The research reinforces earlier work in calling for more positive and innovative approaches and actions to the RUF in policy and decision-making processes as a space and place in its own right (Qviström, 2007; Countryside Agency & Groundwork Trust 2005; Gallent et al., 2004). The workshops and visioning studies consistently identified that decisions on the RUF were often accidental and incidental rather than pre-planned (Scott, 2011; Scott et al., 2012a), leading to a reactive RUF limiting its potential and creating ‘disintegration’ (Scott, 2012). The development of more inclusive and positive RUF visions moving away from the negativity associated with transitory spaces ‘waiting for something better to happen’ was seen as a necessary pre-requisite for improved planning (Scott and Carter, 2011). Furthermore, there was agreement with the ideas of Qviström (2007) that the way in which planners order space may prevent innovative and unconventional ideas manifesting themselves in the RUF (Scott et al., under review b).

The research also uncovered a significant body of research for the Countryside Agency that is no longer in the public domain. A key finding here was the need to capture institutional capital more effectively (Scott, 2011). Equally the need to learn and apply the lessons from previous work and ideas was strongly supported rather than the tendency to invent the new or the different (ibid). In such respects our research findings build on past ideas and evidence but within our own evidence through a range of RUF storylines (Scott et al., under review a).

5.2. The rural aspects of the fringe need to be considered more explicitly in policy and decisions rather than assuming urban-centric ideas

This research sought to redress the urban bias and focus on fringe research and practice. Through our interdisciplinary lens we enabled the potential for rural ideas to permeate the RUF opportunity space. Specifically papers (under review) by Scott and Collier, and Scott et al., b), highlight the potential of more community-based agriculture to influence the landscape of the RUF moving away from simple one-dimensional urban economic growth-based models. The research also challenged the traditional focus on green belts as one-size-fits-all solutions which, in some cases, led to policy incongruence. Rather we argued that green belts should be developed according to the needs of the place incorporating wedge, finger or zonal spatialities (Carter et al., 2012; Scott and Carter, 2012). Thus they become embedded within the development jigsaw in line with other green infrastructure allowing more connected multifunctional landscapes to emerge which emphasise links and interrelationships between urban and rural areas (Scott et al., 2008; Scott and Carter, 2012).

5.3 The built and natural environment is currently pursuing different agendas, policy frameworks and goals within a marked policy and practice divide leading to policy disintegration

Developing ideas first promulgated by Curry (2008; 2010) on the fragmented state of rural planning since the 1947 Town and Country Planning Act, our institutional analysis revealed a significant disjuncture between the built and natural environment. Cumulatively, this led to policy disintegration, magnified by the separate pursuit of EA and SP paradigms (Carter and Scott, 2011; Scott, 2012; Scott et al., 2012b). Our results
provide clear evidence of a confused and chaotic identity and planning response underlined by a lack of understanding and an unsatisfactory evidence base (Scott and Carter, 2011; Scott 2011).

5.4. The ideas of SP and the EA are jargon-heavy; we need to develop more understandable and inclusive language. Our cross cutting themes of Connections, Time and Values allow all professional sectors and the public to engage, interact and participate more effectively.

The initial thought-pieces from team members stressed the need for the research to simplify and make more accessible the complex and elusive vocabulary that characterises both SP and EA frameworks. This became one of our principal interdisciplinary drivers to translate the common components of the EA and SP frameworks into three cross-cutting themes (connections, time and values) that enable different public(s) to navigate the planning-environment divide, enabling any person to engage in fruitful discussion. This was enriched within novel engagement processes provided by the workshops and Rufopoly (learning interactive tool), where we were able to secure important RUF visions across different publics. This attention to process has allowed us to go beyond the usual suspects using diverse methods of engagement to maximise response and reach (Appendices B, D, E).

5.5 The RUF is an edge space crossing many boundaries and leading to marginalisation. This requires improved connections, for example building on recent green infrastructure initiatives, between policies and decisions across scales and sectors in order to secure more joined-up planning.

The theme of connectivity was given a powerful policy relevance at the national level within England with respect to the co-emergence of the Natural Environment White Paper 2011 (NEWP) and the National Planning Policy Framework 2012 (NPPF) but with limited connections between their core messages (Scott and Carter, 2012). Here the planning agenda of the draft NPPF had no cognisance of EA ideas of environmental assets from ecosystem services. Furthermore, the decision therein to abolish the regional layer of planning did not square with the landscape-scale focus of environmental initiatives under NEWP such as Nature Improvement Areas.

Our third video policy brief (Scott et al., 2012c) uses further evidence to show the implications of poor connections in RUF spaces. The example of Bromsgrove and Redditch councils illustrates the scalar incompatibilities when considering the local needs of housing for Redditch against green belt protection for Bromsgrove against the wider needs for the West Midlands. Hampton shows a community-environment disconnect within a new settlement plan. With a resident population of 50,000 great crested newts within a Special Area of Conservation (SAC), the residents were excluded from the reserve by a fence. Such disconnects can engender community alienation and hostility towards understanding and involvement in wildlife protection, and lessons elsewhere.

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2 At the time of the research only the draft NPPF (2011) was published; the final version was published on March 27th 2012 one month after the research had finished.
indicate that community involvement in the management and protection of sites is a more effective strategy (Hurley and Walker, 2004).

Conversely, two examples of good connections involving team members were evidenced in Green Infrastructure initiatives within Birmingham City Council (the 9 Piece Jigsaw) and North Worcestershire Green Infrastructure strategy (concept statements). In both cases the approaches had been effectively embedded into the governance and decision-making layers of councils with significant buy-in from other key stakeholders across the planning, business and environment sectors leading to their inclusion in emerging core strategies (Scott et al., 2012c).

5.6 The RUF is a transitory space, focussed on short term thinking; there is a need to embrace the long term in policy-making. Strategies need to build confidence for long term investment that will realise new opportunities. However, risk taking and learning are important ingredients when planning in uncertain times with partial evidence.

The RUF experiences a constant tension between economic, social and environmental priorities (Scott et al., 2012a) and values (Schiessel et al., 2012). Across the workshops there was clear support for a long-term (minimum 50-year) framework establishing clear principles to guide planning and investment decisions. The workshop on long-termism provided some valuable context here, highlighting the inherent tension between current short-term decision-making systems (largely due to political election cycles), long-term policy challenges and the fluctuations of natural cycles. Looking back to gain insights (section 5.7), is equally as important as looking forward and creating new visions (Scott, 2011a, Scott et al., under review a). The current predilection towards economic production was challenged by existing environmental stresses and limits to development (e.g. suitable land; water resources; existing air pollution levels; rising energy and materials costs). Creating desirable futures for future generations in line with inter-generational and environmental equity requires developments to be more explicitly oriented towards increasing human and environmental health and wellbeing rather than simply growing GDP (Carter et al., 2012).

Co-producing knowledge and agreeing goals and principles in the form of an overarching strategic planning framework can help provide some certainty for investment. However, any ‘masterplan’ also needs sufficient flexibility for adjustments based on new knowledge and needs. For example, Hampton provides a useful lesson of masterplanning incorporating a 25-year vision developed in 1991, of how a large-scale new settlement on a brownfield site (former brickworks) can maximise the use of green, blue and grey infrastructure within a mixed development (Carter et al., 2012). Set within the principles of boldness, structure, quality of life and identity, the subsequent development is an exemplar of sustainable development (Natural England, 2009).

Our North Worcestershire visioning study and several workshops questioned the efficacy of the greenbelt, an icon of long-term planning and endurance which has, and continues to have, a profound effect on settlement planning from its inception in 1955 (Scott and Carter, 2012). Despite widespread political support and public appeal, the workshops and visioning discussions produced a lively debate over its fitness for purpose and its ‘one-size-fits-all’ approach with its unintended spatial impacts on social and
environmental justice with wider implications for connectivity and integration. For example, greenbelt policies result in reactive rather than proactive thinking, potentially limiting rather than enhancing social and environmental viability (Carter et al., 2012: Scott and National Trust, 2012).

Taking long-termism seriously requires a fundamental change in the established way of doing things, as ‘solutions’ require working across different scales and connecting across boundaries. We need to think more creatively about ways to enable people to understand the implications of decisions and actions made now for the future. To date decision-making processes have been largely expert-led, whereas more inclusive approaches are urgently needed to build improved community visions for the future (Carter et al., 2012). Collaborations thus need to go beyond professionals or experts, and include wider publics. The emerging focus on localism provides both opportunities and dangers for long-term planning. Reflectivity is crucial and forms a critical part of adaptive management, an approach worth mainstreaming in sustainability decision-making, along with the precautionary and polluter-pays principles in policy and practice (Scott, 2011).

5.7 We fail to learn from the past when planning for the future. Here, the lack of adequate mechanisms to capture institutional and human capital is significant.

Within our research on published material on the RUF there was a rich legacy of work to draw from. For example, the Countryside Agency research programme (2000-2006) involved some £4 million of funding. Although generating reports and academic papers and a landmark book (Gallent et al., 2004), the core data and reports produced were no longer publicly available. Fortunately, the lead adviser had kept all the material despite a changed job role. The vulnerability of past work as organisational changes, mergers and relocations, result in ‘loss’ of data and evidence, is a matter of grave concern (Scott, 2011).

Our conceptual approach for integration across the built and natural environment is also deeply engrained within the practice of countryside management pursued in the early 1980s (Scott et al., 2012a). A countryside manager working as a facilitator, enabler and guide supported communities, places and environment within a wide range of more localised initiatives. Indeed, the idea was first experimented in the RUF, with many countryside managers operating outside local authority silos as pioneers (Riding, 2010; Scott et al., under review a). This work lacked academic credibility and its evaluation remained hidden from public view. Yet such practice provides important intelligence for policy development in the RUF (Scott et al., 2012a). Our focus on “rediscovering” the rural-urban fringe encapsulates the need for researchers to look back more critically in their research endeavours (Carter et al., 2012).

Consequently, we spent considerable time engaging our research with the PLUREL, SURF and PURPLE RUF networks. Our focus on policy publications, keynote addresses and conference outputs reflects further attempt to promote improved coordination in policy and to build on existing knowledge. We also held and participated in joint and iterative conference sessions at the American Association of Geographers and UK-Ireland Planning Research conferences in Seattle and Birmingham in 2011.
5.8 The RUF is valued as a complex and messy space; but those values need to be unpacked using both monetary and non-monetary approaches. There is a danger that we only value what we measure as opposed to measure what we value.

A common theme emerging across all our RUF evidence was that the prevailing orthodoxy of economic growth, whereby community and environmental values were relegated to secondary importance, was no longer acceptable (Schiessel et al., 2012). There was widespread recognition of the need to move towards more multivariate, inclusive and sophisticated approaches to identify, assess and incorporate people’s values in decision-making processes. Whilst economic tools provide useful methods within which to estimate value of some ecosystem services, there was also significant caution on undue reliance on such mechanisms alone. Methodologies needed to incorporate both quantitative and qualitative research approaches (Scott et al., under review a; Schiessel et al., 2012).

Values were also evident in the way that the planners and environmentalists order and manage space (Scott et al., under review b). We were able to identify how professional value sets risk producing decisions that fail to respect the inherent qualities of place or may inhibit new and unconventional uses (Qviström, 2007). Yet such technocentric values are inherently contested and the ways people perceive and value the components of the RUF differ, creating opposing assessments of a place, engendering significant conflict in the way management responses are identified, developed and applied (Schiessel et al., 2012). Consequently, there is a compelling need to actively engage with different public(s) within and across the RUF to unpack what people actually value in order to inform effective decision making. This allows the maxim to ‘measure what we value’ to take centre stage away from the current pre-occupation to ‘value what we measure’. Participants also argued that consultation processes had to change significantly as they restrict outcomes through seeking endorsement of prepared plans and policies rather than employing more time consuming bottom-up approaches from the outset to influence the framing and choice of policies and plans.

Unpacking the complex interplay of power-relations in the contested arena of the RUF was also important; land-use change is controlled and mediated by key players through the exercise of power in shaping resultant plans, programmes and actions. Our evidence suggests that new institutional responses are required to allow more inclusive and equitable decision-making processes with more active consideration for RUF spaces (Scott and Carter, 2011). From an environmental change perspective there was recognition across all our evidence sources of improved government support for such measures. However, in Hampton, whilst there was empathy for its adoption, the current legalistic framework of planning was seen to be highly problematic given the likelihood of appeals. Here, understanding the difference and need for complementary regulatory, legislative and mind-set tools was critical within a wider appreciation of how a culture change might be achieved (Scott et al., under review a). There was also recognition that at times of economic recession the environment takes second place to other agendas that are deemed more important. It is here that values, long termism and connectivity all intersect in shaping contemporary policy responses that are partial, short-term, unconnected and based on one set of prevailing values. The ultimate lesson seems to be
the need to embrace good evidence, multiple-value objectives set within clear and meaningful visions (ibid).

6. Capacity-Building and Training

The project has secured a high profile in academic and policy arenas due to its focus on a forgotten part of the rural-urban debates. Furthermore, the lack of work on connecting SP and EA frameworks has provided a rich and fertile ground for interdisciplinary contributions. This is evidenced by the six invited keynote papers and wider exposure in the global community of peri-urban researchers.

Of particular importance was a capacity building session the PI co-ordinated on behalf of Relu for the UK-Ireland Planning Research Conference on spatial planning involving Relu researchers presenting their findings to an audience of professional planners. The plenary sessions developed greater understanding between planners and researchers on the scope and potential of spatial planning; a major theme in our RUF research. Scott has also been asked to author a Relu policy-practice note examining the impact of the recently published National Planning Policy framework on the rural economy.

The 16 conferences in Appendix A highlight the wider networks of academic and policy audiences the research has reached across global, European, national and regional networks. We have also organised and run our own final dissemination conference (Appendix B). The PI was also invited to the National Ecosystem follow-on workshops, The Ecosystems Knowledge Network and Bridge VNN to support bid/project development. Here the emerging ideas of the work were able to inform a range of academics and policymakers working on the EA ultimately leading to his endorsement as a member of the UK NEA expert panel.

Rufopoly has also allowed us to train a wide range of people as facilitators to demonstrate this interactive learning tool including team members and seven postgraduate students. On 30th May (2012) we are training 30 further participants across a wide range of policy, practice and academic backgrounds.

7. Outputs and Data

With respect to the value of this grant the outputs produced from this project represent outstanding value for money. Five video policy briefs, one interactive learning tool, six policy publications, one peer review publication with a further two under review and a further four papers under preparation.

Invited papers were provided for Government Gazette (Carter and Scott, 2011); Green Places (Scott and Carter, 2012) and In Practice (Scott, 2012). These papers have exposed the way policy and decisions tend to lack integration with a failure to connect across complex and changing governance arrangements. A key paper in Town and Country Planning also highlights how the RUF has become a forgotten and neglected space in policy and decision making (Scott and Carter, 2011).

The five video policy briefs form the core outputs with widespread dissemination across academia, policy and practice http://www.bcu.ac.uk/research/-centres-of.
Rufopoly is also a key output. This interactive learning tool allows people to understand the research through making their own journey within a hypothetical RUF which contains questions relating to our primary data evidence. The requirement to create their own vision based on the string of decisions/justifications they make in their journey brings a learning dimension into this output that goes far beyond the simple written or video policy brief, and starts to engage the participant in justifying their own ideas and beliefs with a facilitator.

One peer review publication stems from Reed and Scott contributions within a critical commentary paper led by Prager on landscape-scale payment for ecosystem services (Land Use Policy). Crucial here was the role that spatial planning ideas can play in the delivery of such objectives, again reinforcing the central theme of improving connections across environmental and planning governance.

The significant paper to date, however, is the Progress in Planning (under review a) monograph which highlights our research process and methods to inform future planning theory at a time of significant crisis in the discipline. Key results are presented as a series of storylines allowing much of our core evidence to be presented and critically discussed.

8. Knowledge Transfer, User Engagement and Impacts

One unique aspect of this research is that the non-academic policy and practice individuals (Natural England, Forest Research, National Farmers Union, Green Economics Institute, David Jarvis Associates, Localise West Midlands, Worcestershire County Council, Birmingham City Council, Birmingham Environment Partnership, and West Midlands Rural Affairs Forum) were embedded in the research team from the outset. This allowed us to deliver the Relu ideology of policy engagement throughout all aspects of the research. This was challenging for all participants, but in so doing creates a powerful research delivery model to promulgate within our publications and dissemination media. Specifically:-

- The eight workshops were organised by team members providing an effective vehicle to capture member networks, expertise and inform our findings as well as enable knowledge transfer. Over 250 people participated in critical discussions relating to one aspect of management of the rural-urban fringe (Appendix D). They form part of our extended contact list for project updates and events.
- The research led to meetings between senior officers in Defra and DCLG in March 2011. Here the approach and objectives were discussed and critically

3 There was a clear oversight by the author here to include a footnote acknowledgement for inclusion in the journal reflecting the support of RELU ESRC in the research. This was a serious error for which I apologise.
reviewed in line with improved working and cooperation across government departments.

- Rufopoly has been played with reports produced for The Great Debate (26 January 2012) a partnership between professional institutes for the built environment (Royal Town Planning Institute, Royal Institute of Chartered Surveyors, Royal Institute of British Architects and Institution of Civil Engineers and Landscape Institute); Welsh Government (19 January 2012), RELU conference (November, 2011), RTPI (24 May 2012), Staffordshire County Council Cabinet members (9 May 2012); BCU students Level 5 undergraduate (5 March 2012) and Level 7 postgraduate (7 December 2011). Further events are scheduled for professional community groups (30 May 2012); Scottish Government (June 2012); SURF Interreg conference (28 June). Seven postgraduate students were trained as facilitators for some of these events.

- The video policy briefs have also been used on lectures to undergraduate students in greenspace and policy and plans modules at BCU. Students at Nottingham, Heriot Watt and Aberdeen Universities have also used them within their classes.

- The Relu dissemination conference on February 29th attracted 150 participants within a world-wide audience (Appendix B). The range of activities attracted several detailed positive email responses confirming the effective knowledge exchange (Appendix C).

- The use of Twitter via @reluruf and @rufopoly have both helped us engage the project’s outputs with a range of professional and lay public audiences.

- The research has led to a dedicated blog spot for the Birmingham Post (http://blogs.birminghampost.net/news/alister_scott/) and invited guest blog for the National Trust Planning for people initiative (http://ntplanning.wordpress.com/2012/03/23/guest-blog-growth-vs-countryside-moving-beyond-dualism-in-planning/).

- The research has also led to Scott’s inclusion on an expert think-tank advising Shadow Secretary of State Hilary Benn and Roberta Blackman Woods on planning policy (April 2012) with a further two meetings planned.

- The research has been reported in the national media via Times Higher Education, Observer magazine, Birmingham Post, and National Trust.

- The research was used to write consultation responses to the draft NPPF where our lobbying helped ensure the recognition of ecosystem services in the final document.

9 Future Research Priorities

This project has already secured further developments and funding. The PI has been awarded PI status for the National Ecosystems Assessment follow-on project for implementation of the Tools package (UNEP WMC 2012-2014). The research is moving forward in several ways:

- A further application to the KE fund by Carter building on the 9-piece jigsaw component (made in October 2011 but unsuccessful).

- A grant application led by Phillips (University of Leicester) under the AHRC/ESRC Connecting Communities programme incorporated RUF
components and stakeholders as well as the transect as a key methodological tool (successful at stage 1 but full bid not submitted due to JES problems).

- A grant from HEIF to run a Rufopoly workshop for 30 community and policy stakeholders on 30th May. This will allow people to play and evaluate the game in association with our other evidence with discussion as to how this tool can be adapted for community development activity with a particular interest in neighbourhood planning and local plan processes.

- We are also examining the future commercial viability of the game in its present format with a commercial games supplier and/or whether a computer version is feasible or desirable.

- Two dedicated PhD studentships to work on RUF issues funded via BCU (advertisement imminent).

- Application to BESS for a NERC PhD studentship (submitted 25 May 2012)

- A further submission is planned for the ESRC KE programme building on the Rufopoly output in terms of its future refinement as a community development tool.
Appendix References (RELU-RUF Project Report)


• Scott, A.J., Hardman, M. and Adams, D. (under review b) Guerrilla warfare in the planning system: Revolution or convergence in spatial planning and sustainable development discourses?, *Geografriska Annaler* B.
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