

Human Dimensions of Wildlife Research

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Presentation

1. Overview of research projects
2. Summary of outputs
3. Future work?

Research Projects

- Collaborative Frameworks for Land Management (RELU)
- Management of roe deer in peri-urban Scotland (PUD)
- Human-dimensions of species management (HDSM)



Collaborative Frameworks for Land Management

RELU Sponsored Research Project



Macaulay Institute; Forest Research; University of Aberdeen;
University of York; Edinburgh University; DICE (University of Kent)

Research Questions

Why Collaborate ?

- A large number of 'stakeholders'
- A landscape scale resource.

FOCUS: The Collaborative Process

- How does the collaborative process work ?
- What are the problems and barriers to success ?
- What existing factors encourage successful collaboration ?
- How can collaboration help to capture more value from the resource and achieve a sustainable deer population ?

Research Activities / Methods

- Local **case-study research** (meetings, interviews, ‘observation’, stakeholder analysis),
- National-level stakeholder interviews (stakeholder analysis),
- Examination of legislation and its impact upon collaboration,
- Ecological modelling and **use of GIS to integrate manager knowledge**,
- Venison processors survey & supply chain analysis,
- Discussion of lessons from US collaborative wild deer management,
- **Perceptions of woodland landscapes** – discussion groups,
- **Choice experiments**,
- Fellowships / Placements,
- Newsletters / stakeholder engagement.

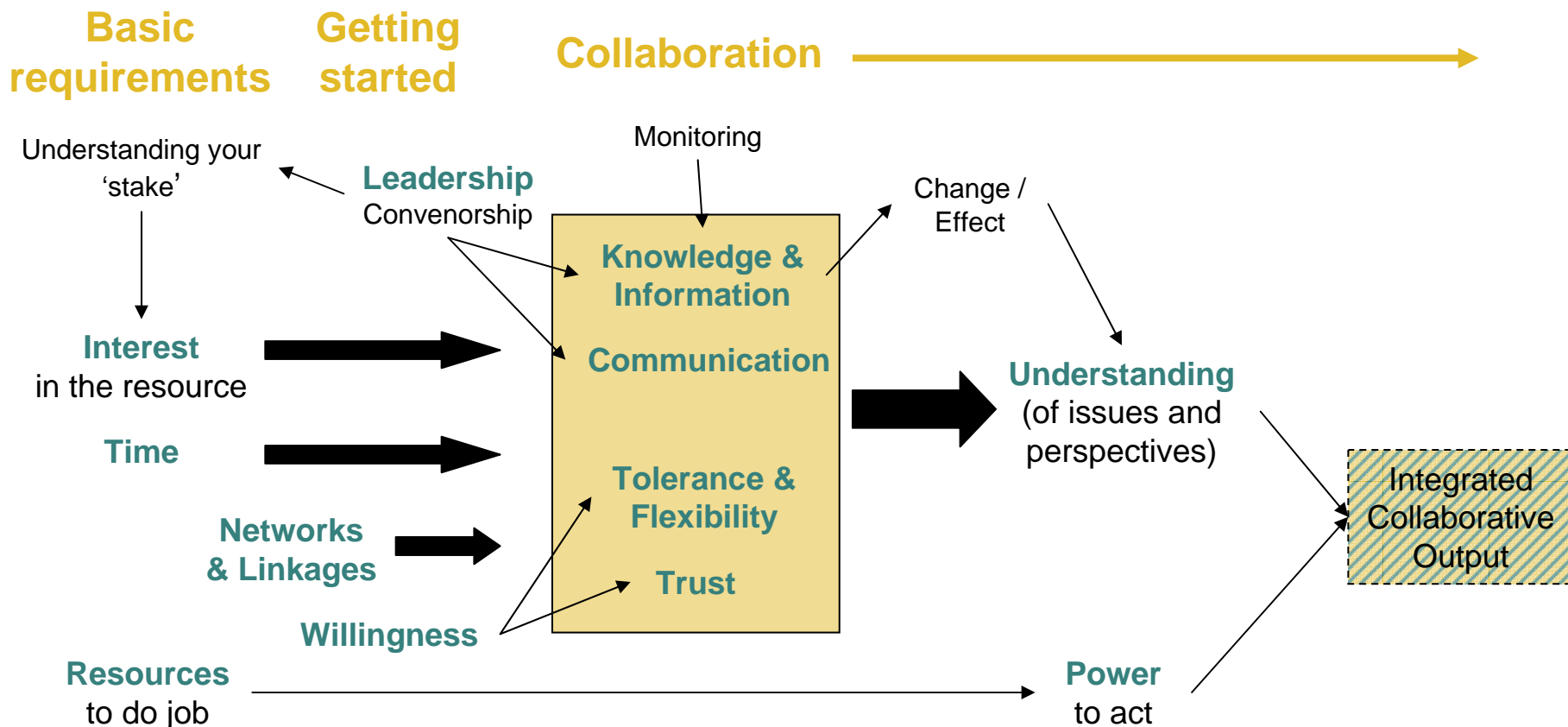
Case-study Areas:

- Dorset (the Purbecks)
- Herefordshire & Shropshire
- Loch Lomond & Trossachs NP
- West Sutherland

West Sutherland – Loch Shin in far distance



Poole Harbour wetlands, Dorset



Project Outputs

- Peer-review papers
 - Deer legislation in UK (in *JEP&M*)
 - Deer as a 'common-property resource' (in *HO*)
 - Stakeholder analysis method (in *JEM*)
 - 'Key ingredients' of collaborative management ??
 - participatory-GIS (in *JAЕ*)
 - Venison markets
 - Choice experiments
- 6 Newsletters
- Policy & Practice Note



Project Motivations & Objectives

- New issues are arising as deer are increasingly encountered in peri-urban areas.
 - New 'drivers' and 'impacts'
 - Interactions between people and deer different
- Old issues are still occurring, but with new 'actors', some who are not used to deer.
 - New partnerships needed
- Roe is the species of primary concern and interest
 1. To provide an understanding of the relationship between people and deer in peri-urban areas.
 2. To identify, scale and map the distribution of the 'drivers' of people-deer interactions in peri-urban areas.



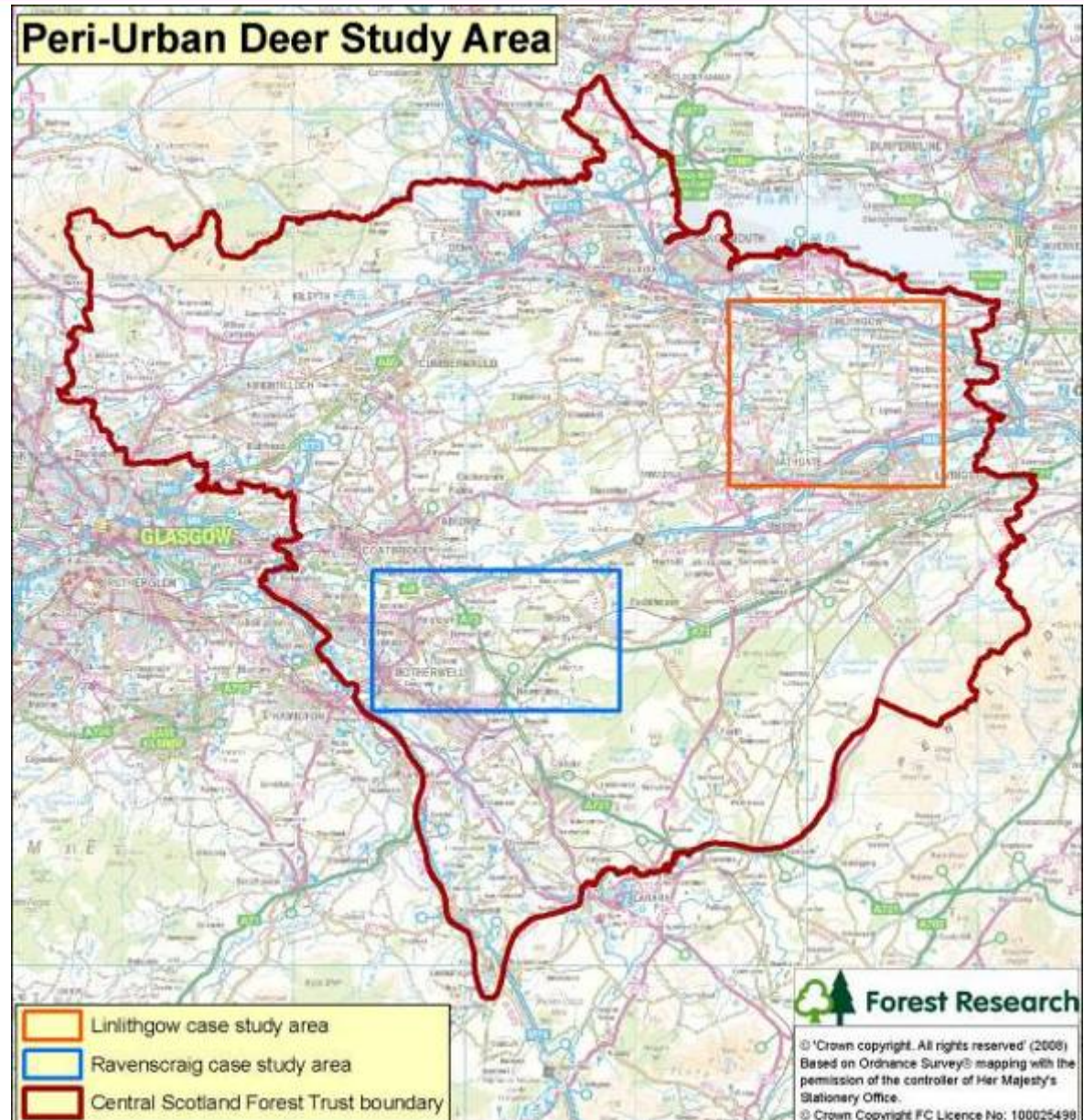


Photographs: Stephanie Ballantyne

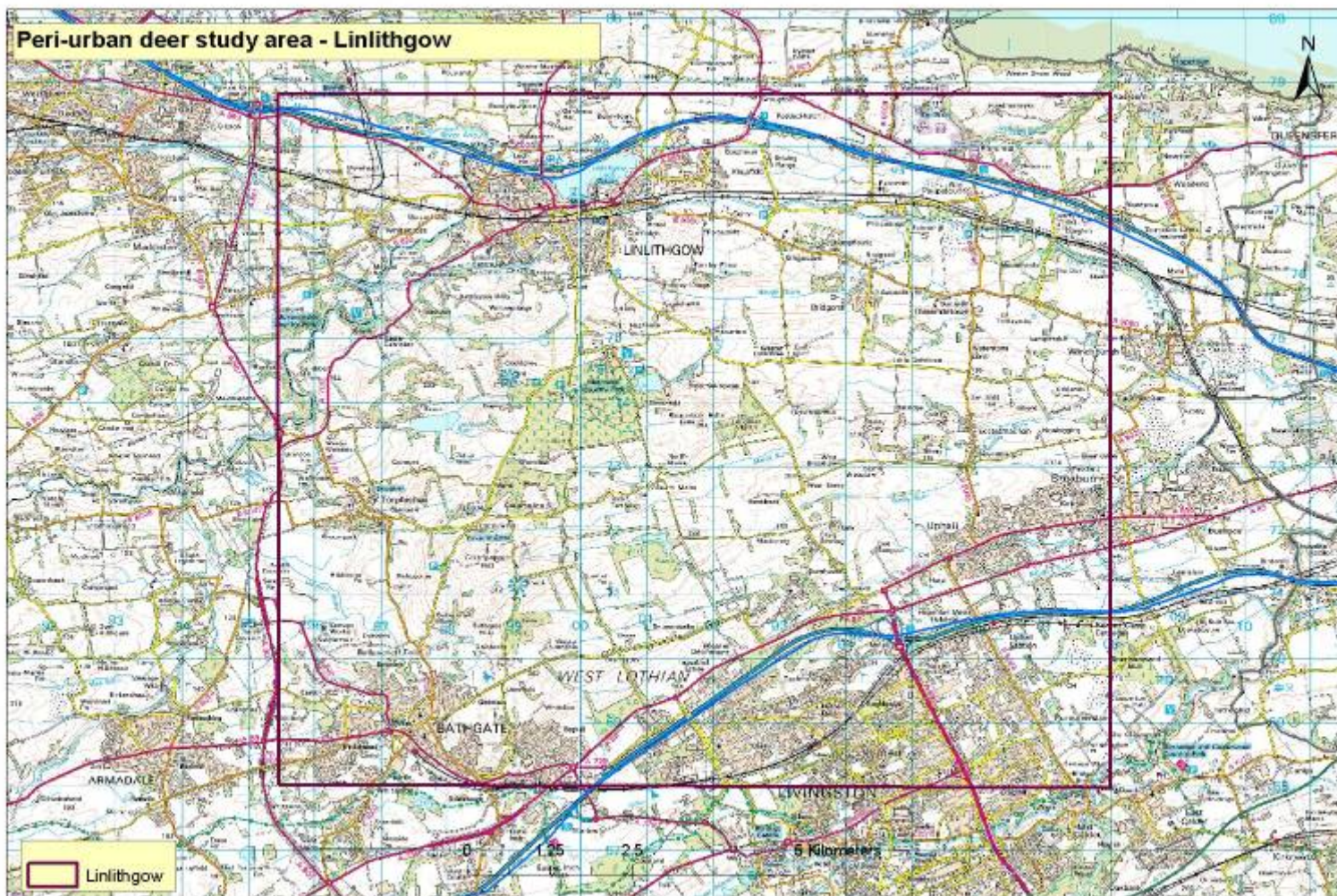
Research Methods

- Discussion-groups & survey
 - to understand local community knowledge of and attitudes towards deer and deer management, and local deer management priorities and strategies.
- Ecological survey (thermal imaging)
 - to provide a more accurate knowledge of local deer presence.
- User workshops
 - to test the appropriateness and application of the 'responsibility framework'.

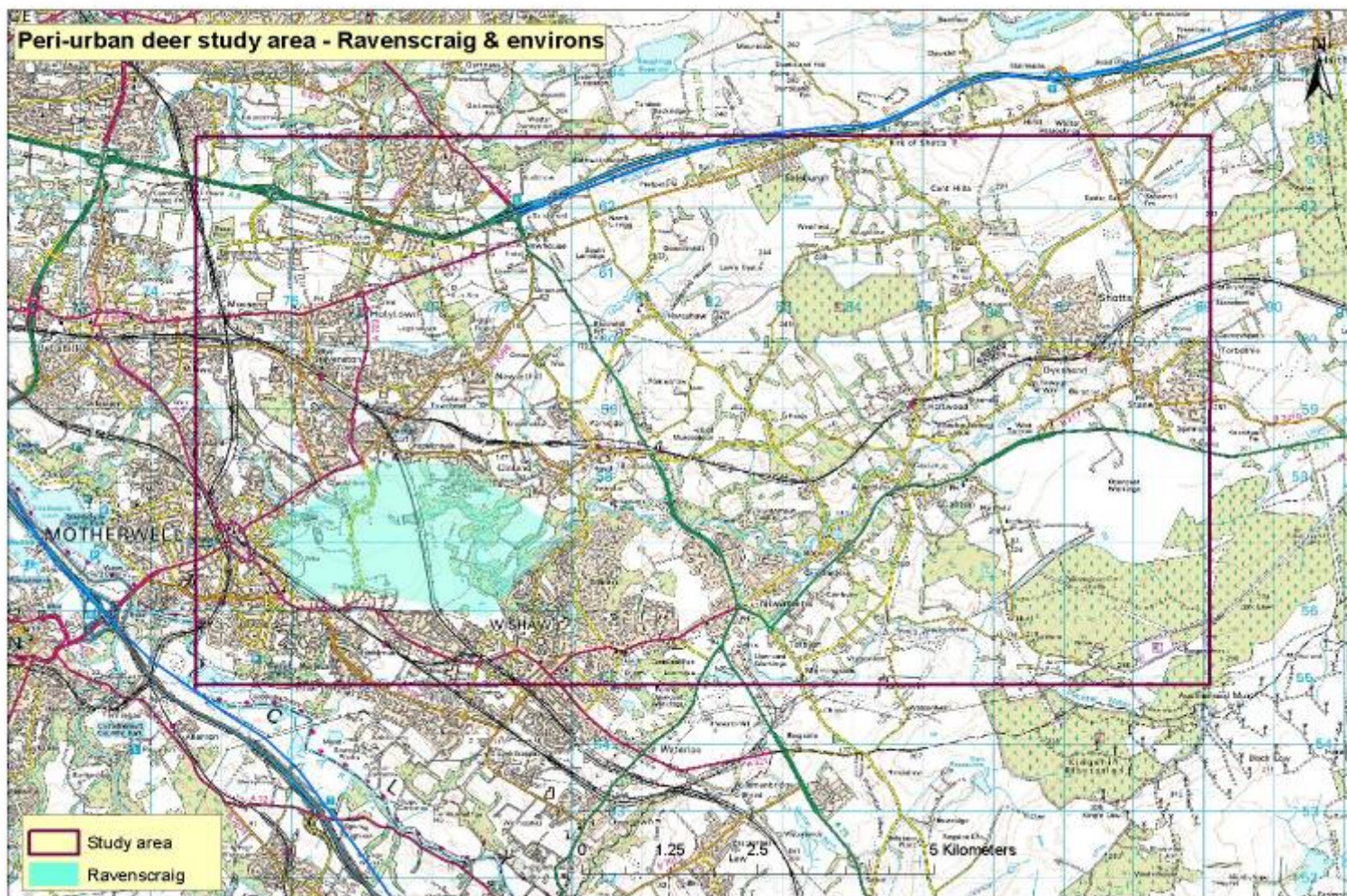
**Study Area –
Central Scotland
Forest**



Case-Study Area 1 - Linlithgow

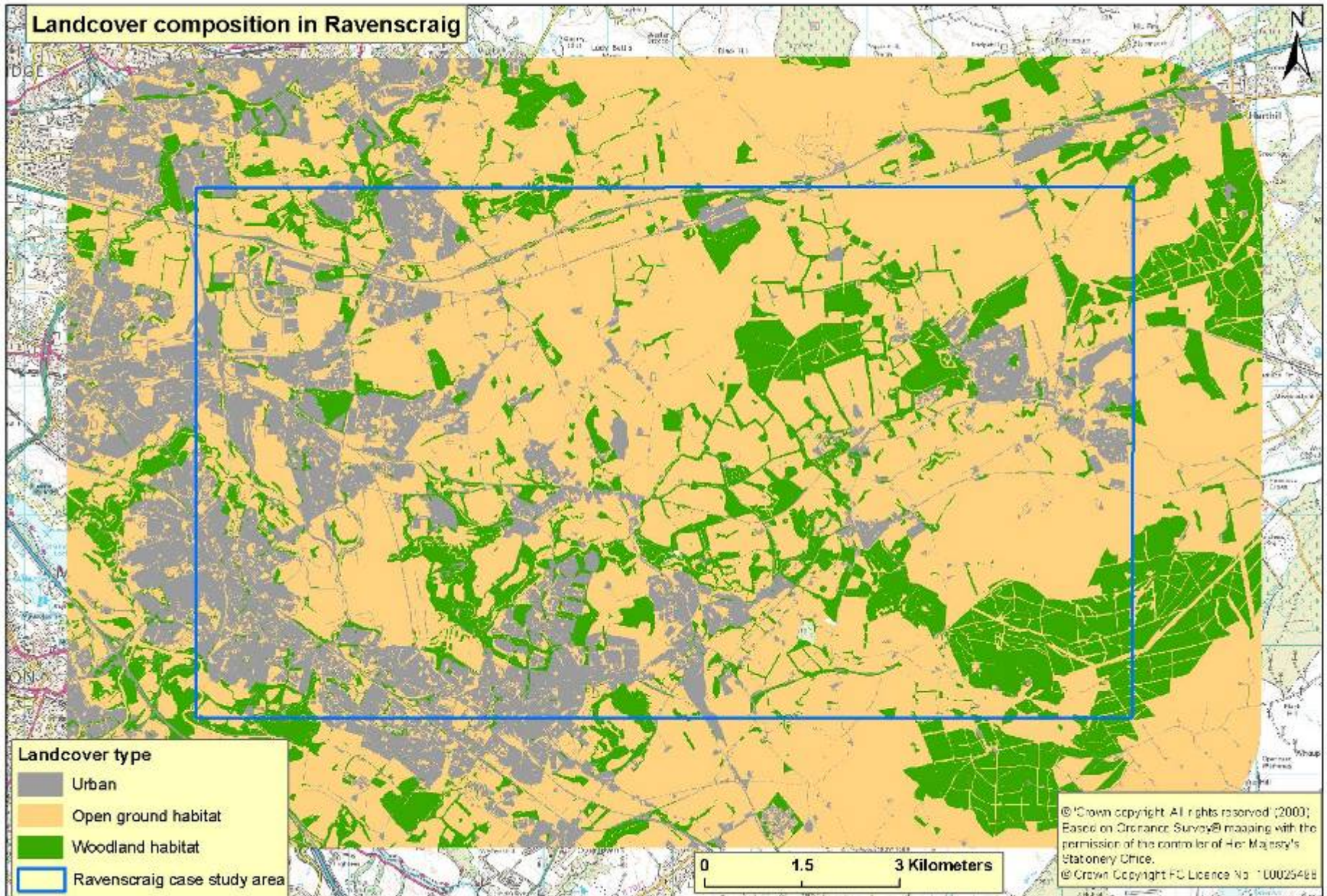


Case-Study Area 2 - Ravenscraig



The 'peri-urban' environment

- The transitional zone blurring the divide between 'fully' urban and rural areas.
- A mosaic of mixed land-uses often including:
 - housing,
 - transport infrastructure,
 - industry,
 - agriculture,
 - forestry, and,
 - 'natural' areas

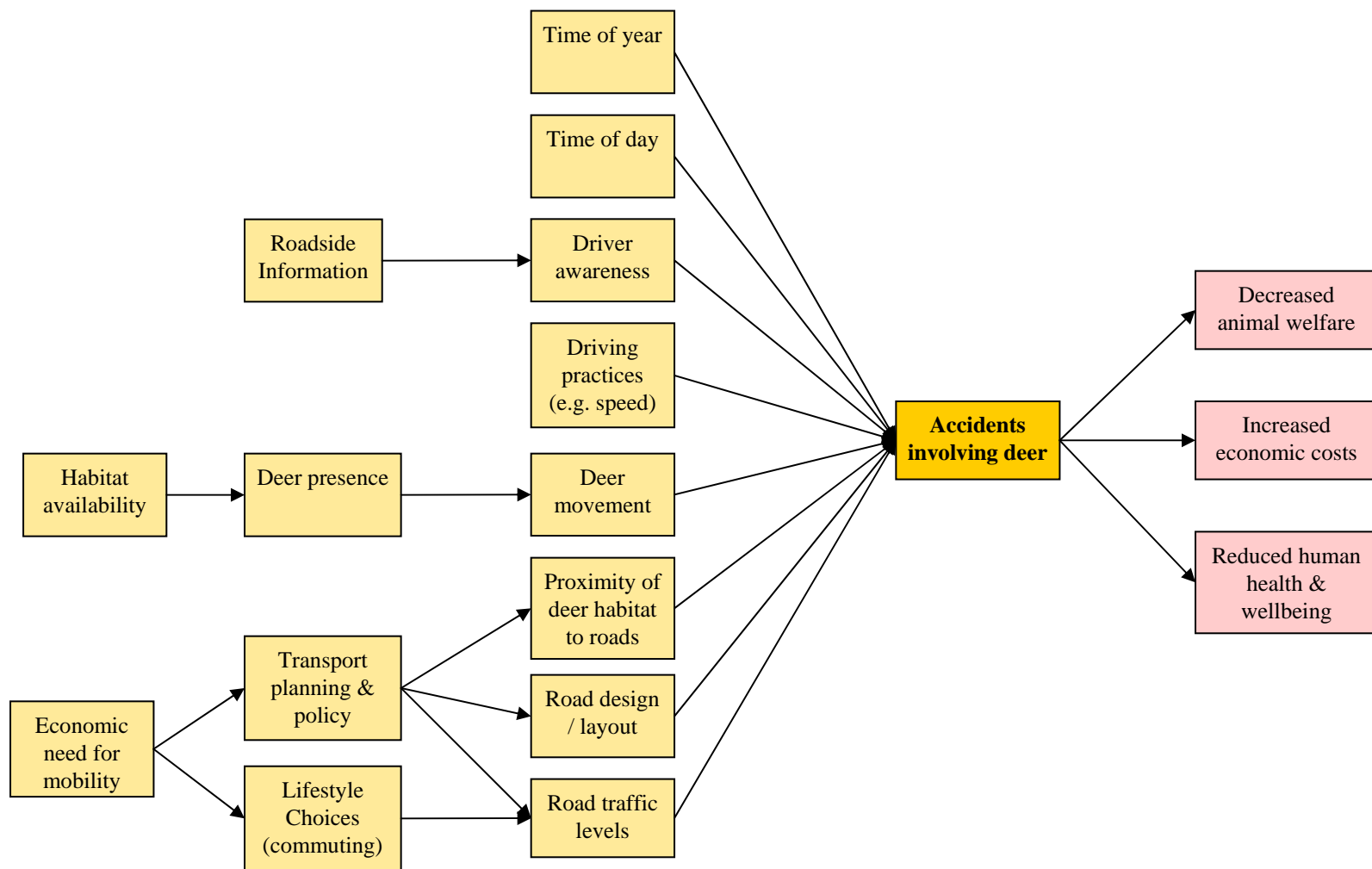




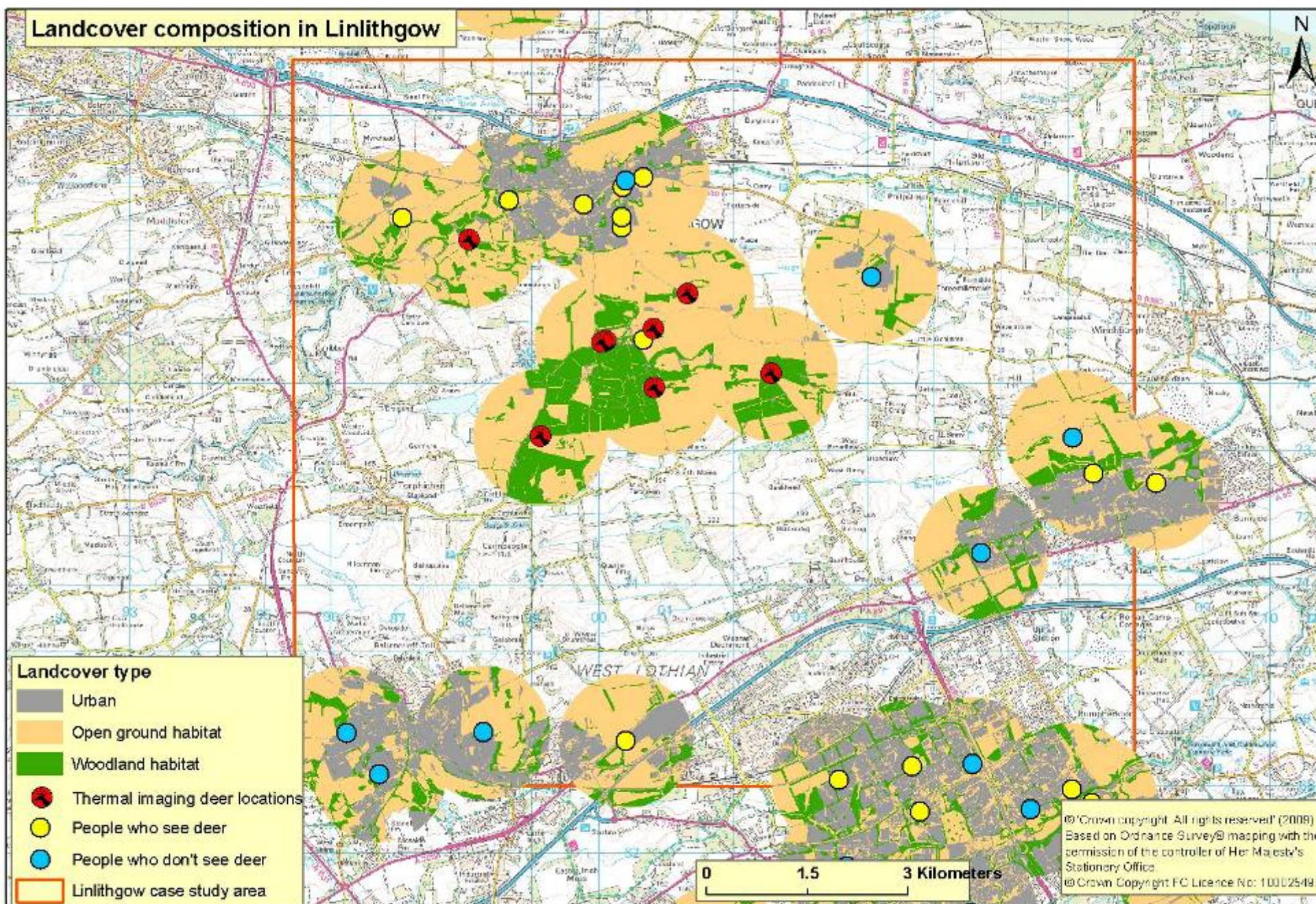
Identifying ‘people-deer interactions’

Positive Interactions (Values)	Negative Interactions (Impacts)
<ul style="list-style-type: none">🦌 Cultural value🦌 Ecological services🦌 Seeing deer (aesthetic value)🦌 Economic value 1 – through recreational stalking🦌 Economic value 2 – as a ‘tourist’ attraction🦌 Venison consumption	<ul style="list-style-type: none">🦌 Agricultural and commercial horticultural damage🦌 Woodland damage – economic production🦌 Woodland damage – natural heritage🦌 Private garden damage🦌 Road-traffic accidents🦌 Acts of cruelty towards deer🦌 Intake of toxins by deer🦌 Disease transmission🦌 Damage to publicly important sites (parks & public gardens, graveyards, golf courses)

Complexity - Road Traffic Accidents

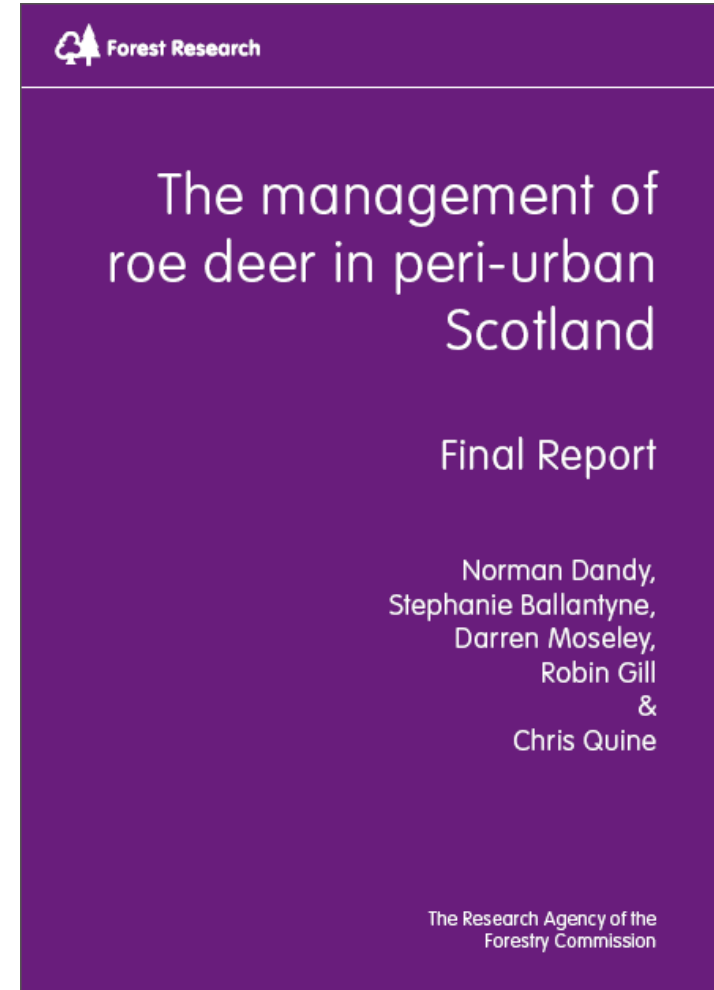


Landcover composition in Linlithgow



Project Outputs

- Final Report
- Peer-review papers
 - Attitudes to management methods
- 1. Qualitative (focus-groups)
 - a. Naturalness
 - b. Overabundance
 - c. Effectiveness
 - d. Impacts
 - e. Animal Welfare
- 2. Quantitative (survey)
 - Fencing & 'scarers' popular; culling not popular
- Popular article
- Posters





Human Dimensions of Species Management

Objectives & Methods

1. Raise awareness of our previous (and ongoing) research and illustrate what we can do.
 2. Generate discussion about forest species and their management.
 3. Identify some important, useful and interesting questions for us to answer.
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- A. Scoping and consultation
 - B. Literature review

Objective: Consult FC colleagues to identify future research needs relating to social issues influencing management of flora and fauna in forests.

Four emerging themes:

- **Forestry objectives and wildlife management**

Why does the FC manage wildlife? How does FC wildlife management fit with other FC objectives? Where does FC's 'mandate' to manage wildlife come from?

- **Wildlife stakeholders – types, perspectives and behaviour**

What are 'public' (and other non-FC 'stakeholders') attitudes to wildlife management? Who opposes wildlife management and why? How can FC's wildlife management be communicated?

- **Forest use and disturbance**

How do the different types of forest 'users' and forest use impact on flora and fauna?

- **Change in the human dimensions of wildlife management**

Where and when do species become a 'problem'? How might environmental (climate) change affect wildlife management activities?

Project Outputs

1. Scoping Report
2. Literature Review – ‘disturbance and forest use’
3. Information note – wildlife management and multifunctional forestry

Future Research

- More attention to how formal governance (legislation and policy) structures management responses
- Continued exploration of attitudes towards management
- Perceptions of ‘own’ (forest users’) impacts on wildlife
- Best partnership working practices for wildlife management & conservation

Thank you

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