



Research note:

# Enabling adaptive co-management of urban land: lessons from central Scotland

Land management practices across urban areas are driven by distinct challenges and opportunities. This research note, aimed at land managers, policymakers, local authorities and other stakeholders, summarises the results of a study undertaken with land managers in central Scotland to identify how land managers adapt their land management practices to deliver multiple benefits for people and the environment. The report identifies how factors such as social networks and collaborations, resources, and funding opportunities can impact land management practices in urban woodland areas.

Our findings emphasise the importance of collaborative partnerships for successful adaptive co-management of urban areas, and highlights the central role of learning across organisations for delivering landscape-scale environmental projects. We recommend that organisations capture formative learning outcomes as part of the monitoring and evaluation of environmental land management projects, and that financial and staffing resources are made available to enable investment in building and strengthening social networks at the individual, organisational and community-level.



# Introduction

The pressures on urban land use are immense. With a strong drive to ensure that land is managed for the public good, there is increasing pressure to ensure that land is used for multiple purposes: increasing public access for recreation and wellbeing, engaging communities, mitigating flooding, and providing housing for an increasing urban population. Landowners and land managers are often required to deliver to high level policy objectives on issues such as climate change, biodiversity and wellbeing, while delivering common objectives across a landscape. Adaptive co-management of land, a process that links the practice of natural resource management with ongoing learning and adaptation to the context, is considered one way to achieve management of natural assets across a landscape-level for ecological, social and economic benefit, a priority for the Scottish Government.

This research note summarises findings from a study undertaken with land managers from two large-scale urban partnership projects in central Scotland. The aim of the study was:

- **to understand what enables adaptive co-management of land in urban areas, and**
- **to investigate the social factors that are central to successful adaptive co-management of land.**

A separate research brief ([Eastwood et al, 2019](#)) summarises the findings of a complementary study undertaken in the Scottish uplands.

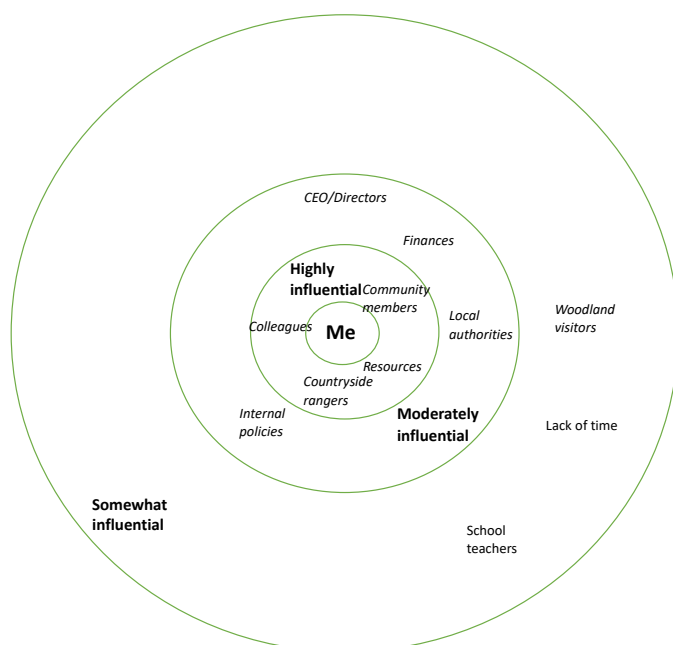
**Adaptive co-management** is a process by which decision-making processes and knowledge about a system (e.g. ecological or social) are revised in a process of ongoing learning and adaptation, requiring involvement of multiple stakeholder- and partner organisations.

## What we did

To understand collaboration and adaptive co-management in urban areas, we conducted in-depth interviews with nine land and forest managers and project leaders from two landscape-scale environmental partnerships in central Scotland. Interviewees represented local authorities, environmental charities, project partnerships, and national environmental agencies. Interviews were undertaken in 2019-2020 either in-person (autumn 2019), or via video-conferencing (spring 2020, due to the Covid-19 pandemic). We asked about experiences of collaboration and co-management of woodlands, and discussed key influences and influencers on decision-making. Participants then developed a 'sociogram' (see figure 1) to illustrate the relative level of influence attributed to each person or organisation.







**Figure 1:** an example of how a participant-led sociogram might look, illustrating issues and actors according to their influence on the land manager's decision-making.

## What we found

### Diverse social relationships and professional networks matter

**Diverse networks and social relationships** are key to the practice of adaptive co-management in urban areas. **Knowledge sharing** between professionals and experts, both within organisations and with external colleagues, is a key part of enabling successful land management across ecosystems, and in identifying opportunities for action to deliver 'added value' activities, practices, and learning.

Our research shows that **collaboration and partnership-working** across landscapes **creates impacts** that are greater than the sum of parts. Such impacts can be direct – in terms of community engagement and habitat restoration, and can create additional benefits such as greater access to funding and/or fundraising ability. Collaboration and working in partnership with others also enables partners in one organisation to fill knowledge gaps in another:

*"... it's a lot easier to get large projects pulled off and completed when you have a lot of partners involved. So if I started working at other urban areas, if those partnerships didn't already exist, I would dedicate a lot of effort and energy into creating those cross-organisational groups because you could accomplish a lot more in the long run"*

(Interview 01)

**Partnerships develop in different ways.** In some cases, habitat management strategies have evolved across landscape-scales, where opportunities to connect natural areas result in new environmental networks and partnerships on the ground. Social relationships, mostly through colleagues and professional contacts, enable the **identification of new opportunities** which lead to creative initiatives for habitat restoration and community engagement. One organisation in our study initiated and developed a successful health and wellbeing nature-engagement programme through a professional connection with a charity specialising in community engagement. Another interviewee felt their organisation was **learning and changing** its approach to managing greenspaces for urban biodiversity and community engagement through **partnerships** with organisations such as Central Scotland Green Network/Green Action Trust.

One of the key foundations of a successful organisational partnership is a strong individual-level professional social network, both externally, and internally within an organisation. Having a diverse team that creates space to **share knowledge** enables a broad perspective, and provides opportunities for learning. **Social networks are thus a key driver of innovative and adaptive co-management** in urban areas. Knowledge-sharing across networks can be especially important where land managers might have a natural science or practical, conservation-focused background, potentially with limited expertise in community development or health and well-being. One regional land manager we interviewed spoke of the importance of having a strong working relationship with social researchers and economists within their organisation to develop woodland management plans appropriate and adapted to densely-populated and sometimes deprived urban areas. Other respondents emphasised the importance of engaging with planning and community development professionals.

*"...we worked really closely with the social policy team through it so in a way it's difficult to distinguish what was coming directly from them and what we created, and what was through joint discussion... the connection with the social policy team was really close ... So there was a lot of joint working about how we do things"*

(Interview 02)

Land managers expressed a need for **further changes in organisational cultures**, more **trust-building between organisations**, and **greater buy-in from sectors such as housebuilders** and developers, to achieve increased environmental and social benefits from land management.

The results of our study emphasise that **learning happens within and between organisations**. This finding highlights the importance of creating opportunities for the development of professional and social networks within and across organisations, especially for newer and more junior staff. The development of such opportunities is especially important, given changing work patterns due to the Covid-19 pandemic.

## Successful co-management responds to and helps to shape policy

National and local public policies and internal organisational strategies create the frameworks, direction and targets for organisations and individuals to operate in, while **allowing local-level adaptation suited to local contexts and ecosystems**. High-level policy direction also creates the conditions to engage with stakeholders and form partnerships to meet those policy aims, especially when introduced alongside funding opportunities.

Land managers are involved in the development and implementation of land management strategies at the local level, often **responding to changing organisational priorities** such as an emphasis on community engagement and increasing the use of greenspaces for health and wellbeing. One interviewee expressed a desire to implement more community development work by connecting with local authorities and the NHS, if future changes in strategic direction within their organisation would enable them to do so. Another interviewee emphasised how learning from other policy areas led

them to adapt their own environmental management priorities.

*"I also started to go to other conferences around health and wellbeing... what [they were] talking about was how good quality green space or a good quality environment can start to break the link between poverty and ill health...It was pretty obvious that health had to become an important part of the programme"*

(Interview 03)

Land managers also practice **adaptive management in response to changes in the natural environment**, where plant pests and diseases (such as ash dieback and/or non-native and invasive species) require new management practices to support and conserve ecological habitats.

Policy and regulatory change, including recording and reporting requirements, can also affect land management strategies, particularly where areas have been given a local or national conservation designation (e.g. Sites of Special Scientific Interest and Local Nature Conservation Sites).

Higher level policy-change and adaptation for urban ecosystems needs **to learn from the implementation of policies through listening to organisations with on-the-ground experience** of green (environmental) and blue (water-related) ecological networks, community engagement and social inclusion.





## Resources matter

The **availability of resources – finances, people and time** – is a key driver for successful adaptive co-management in urban areas. Many land managers we interviewed spoke of new opportunities presented through grants and large funding initiatives (e.g. the National Lottery Heritage Fund (NLHF), the Forestry Grant Scheme and the Woods In and Around Towns (WIAT) scheme). Such **funding schemes often act as a catalyst** for the creation of land management partnerships and enable land managers to implement medium to long-term strategies. However, successful partnerships also take time: the partnership-building which led to one successful NLHF project developed over nearly twenty years, building on smaller projects, investments and collaborations. Such partnerships, which can include adapting governance and decision-making structures, require **trust within and across organisations**.

Resource constraints are a very real **limiting factor** for land managers. Interviewees frequently mentioned a lack of resources – particularly finance and people – to support community engagement, to implement medium-long term visions for habitat protection, and to undertake basic monitoring tasks such as habitat condition surveys.

*“one of the first things that’s fallen by the wayside... with such significant cuts ... we’ve had to ask the ranger service can they please go out and trim paths, which isn’t a very good use of their time.... they’re very talented people who...have training in working with mental health groups, and we’re asking them to trim grass...”*

(Interview 04)

Land managers also emphasise that a **lack of resources limits their ability to engage with local communities**. Cuts to public and local authority funding means that day-to-day contact in communities is increasingly challenging. Linked with the increasing use of urban greenspace (as a result of Covid-19), resource restrictions lead to a risk of damage or litter being left unattended – a factor known to result in increasing anti-social behaviour, thus making woodlands less attractive and less safe to recreational users.

*“A big part of our approach over the past ten years has been really trying to deal with the small issues quickly, so they are not building up. Another part of that is the quality of the site matters. If a site looks well-managed, we’re much less likely to get fly-tipping, we’re much less likely to get anti-social behaviour”*

(Interview 02)

Criteria set by funding bodies can have a substantial impact on land management on the ground, as cash-strapped local authorities and environmental charities develop land-management projects to ensure a successful application. **Funding criteria are thus a driver for partnerships and collaboration** and have a substantial impact on land management plans. Where applications are successful, new community engagement plans and habitat restoration or enhancement work can be coordinated, to enhance the connections between people with nature and improve ecosystems.



## People and communities matter

Community engagement is important in areas where high quality natural environments are surrounded by residential neighbourhoods and new housing developments. Work with schools and young people is often a priority, as is engagement with residents, to involve people in decision-making about how communities want to use their greenspaces. Respondents felt that long-term community engagement projects in socially-deprived areas can empower and increase the esteem of local communities.

*“Some of these [community engagement] activities provide quite a good stepping stone for people to, you know, build their self-esteem, and in turn, for the community itself to build its self-esteem. .... It’s quite important that that happens and that people then take pride in their local natural environment, in their local community. And so that’s all part of the regeneration process.”*

(Interview 05)

Land managers frequently engage with the public in the development and delivery of their objectives. **Local knowledge matters**, and listening to comments made by residents, whether formally or informally, enables better understanding of community needs, and a joint sense of ownership of woodlands and greenspace. Successful public engagement is also considered to reduce anti-social behaviour, helping to ensure that greenspaces are considered pleasant and safe to visit.

*“I think what puts off people with these woodlands that haven’t been managed, the trees have grown over the footpaths, you have to duck down, you can’t see either side of the footpaths, so there’s that kind of general feeling of ... feeling a bit unsafe ... they want somewhere safe to walk, a good walking surface and just somewhere to enjoy nature or just somewhere to walk their dog...”*

(Interview 06)

## Summary and recommendations

This research study shows how adaptive co-management in urban areas is enabled through social networks, collaboration and partnership working. The learning and knowledge-sharing through networks and social relationships within and across organisations creates an environment where adaptive co-management can be successfully practiced.

- Managing urban woodlands and ecosystems requires a large well-connected network of expertise, in diverse sectors (public health, planning, biodiversity,

Diverse networks and **good social relationships with residents and community groups** were considered as important as professional networks for successful adaptive co-management. Employing residents as part of a project team enabled one land manager to better understand the views of community members and the challenges that might prevent them from engaging with greenspaces. Engagement with residents near greenspaces creates **opportunities for learning**, which enables adaptive management to be put into practice.

community development), professions, and across different scales.

- Knowledge expands across social networks, including internal and external colleagues, and community members.
- The creation and successful implementation of landscape-scale urban land management partnerships takes time and commitment.
- Openness to learning from diverse voices enables new initiatives to take hold.
- Collaboration and adaptive co-management means more can be achieved for people and the environment than working within single organisations.
- Resource constraints reduce opportunities to engage with communities on the ground, and limit opportunities for adaptive management.
- Creating strong, community-based social networks enables greater understanding of local experiences of greenspace, which can lead to new opportunities for adaptive co-management and community empowerment.
- New funding opportunities provide openings for existing partnerships to create new habitat and community-engagement projects, and can catalyse new collaborations. Funding criteria often determine the scope and focus of projects on the ground.
- Adaptive co-management is an ongoing process, requiring learning to adapt to changing policies, funding schemes, resource levels, organisational priorities, and ecosystem change. Continuous learning means people and organisations can be responsive and agile to these changing circumstances.





## Recommendations

- Organisations should seek to reflect on and capture learning that takes place through adaptive co-management of land and collaborative partnerships, and share their findings through more formal means (formative evaluation). Organisational learning should be integrated within monitoring and evaluation of cross-landscape projects.
- Increased levels of funding should be targeted towards urban greenspaces and staff resources (especially community engagement staff) to support them to engage with communities.
- Efforts should be made to expand professional greenspace networks to include property developers and building contractors, to facilitate learning about the links between greenspace, health and wellbeing, and to support knowledge about biodiversity.
- Project funding for collaborative projects needs to ensure sufficient resources are allocated for knowledge sharing, learning and trust building across diverse networks and social relationships.
- Further trust-building and learning opportunities between organisations, communities and staff with different backgrounds, knowledges, and experiences should be facilitated.

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### Suggested citation:

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### Further reading:

Eastwood, A., Fischer, A., Hague, A., Brown, K. (2019). Adaptive co-management of the Scottish uplands – the role of social networks. Research Brief. The James Hutton Institute, UK.

Eastwood, A., Fischer, A., Hague, A., Brown, K. (under review for *Land Use Policy*) A cup of tea? The role of social relationships, networks and learning in land managers' adaptations to policy change.

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MacLeod, C.J.A., Blackstock, K., Begg, G., Eastwood, A., Fischer, A., Lackova, P., Kuhfuss, L., Shortall, O., Vinten, A. (2020). Recommendations for landscape-level adaptive management for ecological, economic and social outcomes: findings from five case studies. The James Hutton Institute, UK.