



# SCOTTISH POLICY GROUP

BRITISH ECOLOGICAL SOCIETY

*A summary report from the Pie and a Pint event, held on 13<sup>th</sup> November 2018 at the Edinburgh Centre for Carbon Innovation, Edinburgh.*

## “Does a natural capital approach deliver for biodiversity conservation?”

### Introduction

Pie and a Pint (PAAP) events are informal information sharing opportunities run by the British Ecological Society (BES) Scottish Policy Group (SPG), and open to anyone with an interest in the topic. This event was held to provoke discussion and debate by professionals, students and policymakers around the topic of natural capital as a conservation tool. Overall, 44 attended, including policy staff from the BES London office and members of the Scottish Policy Group Committee.

The evening began with five invited speakers offering short presentations on the topic that reflected their position and experience. Following a short Q and A, the participants broke out into groups to discuss a number of key questions in more detail, and the evening finished with the opportunity to freely network.

This report reflects some of the key points and discussions from the evening: it is designed to be a summary document, and not a complete transcript.

### Speaking session

Each speaker was given a six-minute slot to present their views on the question, “Does a natural capital approach deliver for biodiversity conservation?” All questions for speakers were kept until the end of the session. This section highlights the key points from each speaker.

#### *Anne McCall, RSPB Scotland*

- There is a paradox that we increasingly understand the importance of a healthy natural environment, yet wildlife continues to decline both globally and domestically.
- One reason for this paradox is that our economic system fails to reflect either the full costs of environmental degradation, or the full value of the benefits that nature provides.
- Natural capital is a way of looking at the environment from an economic perspective, so that nature can be integrated into decision-making. It focuses on the value that living and non-living

natural resources (the stocks) provide to society by supplying nature's 'goods and services' (the flows).

- It could drive more balanced and sustainable decision making by bringing biodiversity into the boardroom in a language that will be understood and acted upon. Alternatively, it could reduce nature to a commodity that can be potentially traded or degraded based on a balance sheet.
- RSPB tried to produce a natural capital account for all their nature reserves in England to quantify the overall value they provide to the public. They were only able to measure some of the benefits that the nature reserve network provides, but the value outweighed the costs of managing them by 2:1.
- RSPB also assessed the global costs of degrading natural habitats along with the benefits of conserving them and the conclusion was that financing an effective global programme for the conservation of remaining wild nature would yield an estimated benefit one hundred times greater than the cost.
- Overall, it was a hugely valuable learning exercise and has informed views on what might need to happen next to make this a more valuable tool.
- The Natural Capital protocol provides guidelines for companies to undertake assessments, but further work is needed on assessing biodiversity. The Natural Capital Coalition is running a project with the Cambridge Conservation Initiative to look at defining, developing and delivering more robust biodiversity inclusive natural capital assessments. They are looking at three main challenges:
  - Accounting for the role biodiversity plays in maintaining ecological functions which underpin the continued provision of goods and services
  - The value of nature as nature
  - Understanding the measurable benefits biodiversity plays in supporting nature's ability to provide a broader range of services, e.g. plants providing nectar to pollinators that ensure that crops are fertilised
- In conclusion, the natural capital approach has the potential to be a very useful tool, but like many models, it can only be as good as the data that supports it and the methods that underpin it.
- For more information: 'Accounting for Nature; A Natural Capital Account for the RSPB's estate in England' see [report](#).

#### *Tom McKenna, Scottish National Heritage*

- Natural capital can deliver biodiversity conservation to an extent, but things could be better. There are issues about getting a direct link to biodiversity because it is not explicitly or directly accounted for within the ecosystem services framework.
- The natural capital approach is effective because it is interested in the multiple benefits provided by the environment, allowing us to understand the multiple functions in an ecosystem and value these more.
- Biodiversity is a benefit that people value:
  - Genetic variation is useful from a scientific standpoint
  - From a cultural perspective
  - It also improves the quality of some of the other benefits we receive e.g. aesthetics, recreation and tourism. The latter has been shown in Forest Enterprise's national accounts that diverse forests for recreations are worth much more than timber.
- The natural capital approach ensures that we don't focus on solely one outcome but look to maximise the benefits from the entire ecosystem. To ensure that they can continue to provide these benefits we need to make sure they are functional and resilient and for this to happen the habitats need biodiversity.
- The Natural Capital Asset Index (NCAI) has a lot of this already built into it – biodiversity indicators are included where possible – woodland, farmland and butterfly and bird indexes as well as number of urban bird numbers provided by the British Trust for Ornithology (BTO). The NCAI was adapted from a biodiversity indicator and the theory behind it requires strong, functional resilient ecosystems to provide benefits to people.

- Scottish Natural Heritage (SNH) along with Scottish Environment Protection Agency (SEPA), Crown Estate Scotland (CES) and other organisations ran a natural capital protocol trial on land-based businesses. The natural capital protocol is used to apply the NC approach to businesses and identify dependencies and impacts, risks and opportunities of their businesses on the environment.
- There are issues around promoting those benefits that are non-market, that benefit the wider society but do not provide private income or benefits to the producers. Natural capital shows the multiple benefits that the environment can provide, including those that are market and non-market.
- Ultimately, it is not a biodiversity or natural capital argument we should be making here. Biodiversity is fundamental for natural capital and they are inextricably linked. Natural capital approaches should use a common-sense approach and include a biodiversity metric as part of understanding the condition of the stock.

*Pat Monaghan, University of Glasgow*

- The natural capital approach was, to an extent, born out of desperation in that it seemed that the 'nature for its own sake' approach was not working. This led to the development of more people-centred approach, and the inclusion of the idea that we could place a value on the services that nature provides to human populations.
- The natural capital approach means that conservation is focussed on conserving service providers rather than biodiversity.
- There is clearly utility in the natural capital approach in some contexts. It helps ensure that the value of nature – whether monetary or other – is considered in decision-making processes where species or habitats are under threat. This economic approach can be very useful with politicians, funders etc. especially in situations where nature is given a low priority.
- However, it clearly isn't delivering for biodiversity conservation, as evidenced by the recent Living Planet report.
- In fact, it could make things worse:
  - We can replace or enhance services to the detriment of biodiversity, e.g. pollination is considered a key ecosystem service. Researchers at the University of Delft are developing robotic bees to pollinate crops and compensate for loss of insects – good for the service, bad for biodiversity conservation.
  - It can have a negative effect on ecosystems, e.g. we are already seeing increasing global homogenisation of ecosystems, with generalist species favoured over specialist species
- We have two approaches: we can conserve services, OR conserve species and habitats. These have two different aims and outcomes.
- Natural capital approach can be good for persuasion in some circumstances, but not good for setting conservation priorities and policies
- We need to conserve nature and services, not nature as services. Intrinsic value is a hard sell but emotion is a powerful force. Biodiversity is a global public good.

*Charles Dundas, Woodland Trust*

- Overall, a natural capital approach can help biodiversity conservation.
- Biodiversity is only being improved incrementally under the current system. We need to get people to value nature, which may lead to better conservation outcomes.
- Sometimes to communicate we need to put things in economic terms, into terms that businesses understand – so there is nothing wrong with talking about profits and losses.
- The people who don't value nature for nature's sake often make the decisions regarding development; therefore, we must speak their language to enact change. The natural capital approach can achieve this.

- True environmental cost is considered in a natural capital approach. For example, birds versus pesticides – if the true environmental costs of using pesticides was considered, then it could lead to better decisions.
- In a natural capital system, the ongoing legacy of decisions is accounted for – and it is a decision-making tool
- One problem is that it's only as good as the data that goes into it.
- Questions therefore remain regarding how we get a true natural capital approach to work.

*Nick Hanley, University of Glasgow*

- Natural capital as a concept that arose in 1989, and was coined by environmental economists David Pearce, Ed Barbier and Anil Markanday in the context of comprehensive wealth accounting and sustainable development.
- In economic terms, natural capital is about adding up all of the discounted value of the benefits we obtain from nature – including assets such as renewable and non-renewable resources, biodiversity and wetlands.
- We are just starting to develop long time series for the UK and other developed countries, which shows how the make-up and overall value of this asset has changed over time.
- Natural capital only helps biodiversity conservation in the following sense: you can tell governments that conserving biodiversity is a way of buying into comprehensive wealth concept and that conserving biodiversity is one way of investing in natural capital.
- To put biodiversity into natural capital account, we quantify indicators going up or down, and then translate these into impacts on human well-being and profits.
- There are several reasons why natural capital is not a useful approach for biodiversity conservation:
  - Low value. For many countries such as the UK, in economic terms the bulk of natural capital's value comes from resources such as oil & coal reserves. Biodiversity probably represents only a small proportion.
  - Comparable units. Natural capital has to be put in monetary units. That means the same monetary units for adding forest and wetlands – can these be compared in money terms? In addition, it is incredibly difficult to put monetary values on many aspects of biodiversity change – see this [paper](#).
  - Low priority. The natural capital concept is about “comprehensive wealth,” which includes human capital, social capital, produce and financial capital. As long as the comprehensive wealth stock is not decreasing, this would be seen as sustainable. Natural capital is not “prioritised” in any way over other forms of wealth.
  - Low incentives. In terms of conserving biodiversity such as, golden eagles conservation, the incentives for land owners are not there - landowners don't get the right market signals; so, this is about market failure, not natural capital accounting.
  - Undervalues rarity. Rare and vulnerable species will not be particularly protected by a natural capital approach, except in so far as their economic value at the margin is higher than common or un-endangered species.
- We do need better ways to finance conservation, and ways to find correct incentives, e.g. hen harriers versus grouse. Hen harriers are competitors, as they predate on young grouse and a natural capital approach won't solve this conflict problem. Although it is known that there is a willingness to pay for hen harrier conservation, the market rewards land owners for every day that is available for shooting. So, hen harrier recovery will be about addressing market failure, not natural capital accounting.

### Workshop session

The speaking session was followed by group discussions. Participants broke into smaller working groups, and discussed the following questions: “when is a natural capital approach useful for biodiversity conservation?”, “when is a natural capital approach not useful for biodiversity conservation?”, and “is there

a middle ground?" The key points from the discussions across all groups are summarised below.

### *When is a natural capital approach useful for biodiversity conservation?*

#### *Promotion*

- General promotion and discussion of the concept of biodiversity.
- Promotion to any group that may place no or little value on biodiversity but can relate to the concept of capital, e.g. economists, politicians.

#### *Changing conversations*

- To influence environmental norms amongst the general public.
- To bring it into the language of policymakers.

#### *Holistic views*

- Encouraging joined up thinking between different aspects of an ecosystem.
- Protection of whole ecosystems rather than individual aspects

#### *Holding to account*

- Assessing the overall impact of individual projects on biodiversity in order to calculate mitigation/compensation.
- Integrating the value of ecosystems into the planning process (although a danger that biodiversity loss will then simply be an additional cost added to the development).
- Assessing the value of ecosystems in order to protect them, such as payments by those who are benefiting from the services provided. For example, natural capital accounting has been used in Guatemala and Costa Rica to consider the value of forests, including setting payments for ecosystem services in the latter.
- A standardised framework for business to identify, measure and value their impacts and dependencies on natural capital.

### *When is Natural Capital NOT useful for biodiversity conservation?*

#### *Missed species/habitats*

- Conserving individual rare species or communities.
- Conserving species that have no direct (known or recordable) value to humans other than their existence.
- Indicators are high level and general, so no nuance and can miss many important aspects.
- Turns into a focus on "favourite" species potentially at the expense of others.
- Unclear how to capture all elements of natural capital e.g. mycorrhizae.

#### *Poor strategy*

- Not good for setting conservation priorities.
- Difficult to translate into effects on the ground.
- Problems surrounding conflict between ecosystem services vs biodiversity.
- Encourages materialistic thinking (nature purely there to provide a service)
- Need to redesign: informed and involved local bodies are NOT using natural capital in action.

#### *Distraction*

- The natural capital concept can distract attention from biodiversity directly.
- Not palatable for everyone: losing time/energy arguing over this.
- It can be dangerous to settle for a concept that we think is 'good enough' rather than seeking to do better.

- There is a perception amongst some that the concept of 'intrinsic value' has not worked for conservation, and therefore we need to try something else, but perhaps we may be better off trying to improve the way we use the concept of 'intrinsic value'.

### *Is there a middle ground?*

#### *Adapting the approach*

- Putting a relative value instead of an absolute monetary value could be a possibility.
- NC *should* make everyone part of the process but need to make it more specific to day-to-day living.

#### *As a tool for change*

- We don't necessarily need to convince more people about natural capital, just use it as a tool to convince people to live differently. People need to understand the biodiversity consequences of economic activity.
- Could be used to increase bottom-up pressure (as was done with marine plastics recently).

#### *Alongside other methods*

- We can use the natural capital approach as part of the bigger work and discussion on biodiversity, but it isn't a silver bullet for conservation.
- It's not the only way we should be thinking about biodiversity, there are other mechanisms to use alongside it.
- We would need to regularly review if it works for biodiversity.

## Conclusions

The workshop provided an opportunity for interested parties to discuss and debate the ideas and applications of natural capital for biodiversity conservation in the UK. The Scottish Policy Group would like to thank all the speakers for providing such a stimulating debate, and to all the attendees for participating in the workshop.