

The restoration economy

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When it comes to biodiversity, the UK is one of the most impoverished places on Earth. To restore it, we need new financial models for the countryside, maintains David Hill

By land area, agriculture has caused the greatest losses to biodiversity in the UK ? 97 per cent of meadows have been destroyed since the Second World War, while, since the early 1970s corn buntings have declined by 87 per cent, skylarks by more than 75 per cent, linnets by 76 per cent and turtle doves by 95 per cent.

Built development has also permanently removed wildlife habitat through direct loss or fragmentation into smaller parts. Little regard has been paid to compensating effectively for those losses in the planning system. As a result, most of the remaining biodiversity in England is now confined to the 30 per cent or so of the land area that is not dominated by arable farming, improved grassland or built development. Many lowland areas of the UK have effectively become green concrete as far as biodiversity is concerned.

At the same time, plenty of us are enthusiastic about wildlife conservation. Membership of voluntary conservation bodies is significant; the top 17 have a combined income of ?980m and spend about ?370m on conservation. Added to this, the government pays about ?400m in agri-environment grants to farmers to protect the natural environment in certain areas. But to date, our love of wildlife has not averted massive rural biodiversity loss.

Nature and natural capital are now being recognised as critical to our health, prosperity and economy. To capture this value we need greater investment in it, across a range of initiatives. Nature is an essential not a luxury, and the services and resources it provides us contribute at least 40 per cent to global GDP. Yet for too long we have valued natural capital and biodiversity at zero, and, as a result, the bank of nature is nearly empty.

We need a substantial savings plan to restore balance. We should start by creating a restoration economy ? a term coined by biodiversity compensation broker [Environment Bank](#) to demonstrate how making nature economically visible would generate new skilled labour in the rural environment where job prospects are currently challenging.

There are 3 broad areas of funding that collectively would enable the creation of the restoration economy.

Land management contracts

While the UK is still a member of the EU, farmers receive about ?3.2bn annually to subsidise their industry and about ?400m in payments to mitigate the damaging impacts of farming and food production. This will not continue.

After Brexit, this money will be paid out to farmers through contracts under a new environmental land management scheme for providing environmental goods and services, for example, by creating and managing long-term wildlife habitat at scale. Statistics from the Department for Environment, Food & Rural Affairs show that, on average, farm businesses are only viable because of subsidy, in the form of the [Basic Payment Scheme](#). Many farm businesses are therefore likely to fail unless there is a system of payment of public money for public goods.

I propose that the payment mechanism should be secured through locally relevant, 25-year contracts with farmers and land managers in accordance with a management plan for their farm. Payments would be results-based, unlike the current subsidy and agri-environment payments regime; subsidies are paid irrespective of environmental performance and the agri-environment payments on the basis of complex outputs that do not make as significant a contribution to environmental gain as they should.

Criteria for results-based payments would be set within effective long-term contracts, commercially priced to offer incentives to the land manager with simple administration, straightforward regulatory compliance, and flexibility. There needs to be a formal contracting environment where farmers are identified and directly contracted to meet specific targets, or where specifications for wildlife habitat creation, for example, are put out to tender, perhaps by reverse auction, identifying exactly what the money is buying.

The independently established contractual model, I believe, offers the best opportunities for improving the environmental performance of farming. Farmers would bid to secure contracts either singly or, at catchment scale, by collaborating with each other. Where farmers work together to provide conservation on a greater scale, the areas of land over which biodiversity could be restored would be substantial. Restoration over large tracts of land in this way also ensures greater biodiversity than working with small fragments of land, so farmers should be encouraged to collaborate to secure funding and, in so doing, build resilience into their business models.

Habitat offsetting and habitat banking

Having introduced the idea of biodiversity offsetting into the UK nearly 10 years ago, the government is now requiring new developments to ensure a net gain for biodiversity in both the [25-year environment plan](#) and the [National Planning Policy Framework](#).

There is general acceptance across government, conservation NGOs, the [Chartered Institute of Ecology and Environmental Management](#), [Chartered Institution of Water and Environmental Management](#) and academia that development should provide a net gain in biodiversity. It is no longer appropriate for development's impacts to continue without meaningful compensation.

For too long, planning authorities have failed to make biodiversity a material consideration in planning. Ecological consultants have designed and promoted on-site mitigation that rarely does anything of value for biodiversity. You may be startled to realise that the costs the developer has sunk into a mitigation scheme within the red-line boundary of the project site not only provide little benefit in terms of biodiversity conservation, but they have also consumed developable land. These sums would have been better invested in large-scale schemes off site where the habitat is protected for the long-term. Some appropriate mitigation within the development boundary is important though biodiversity net gain and the restoration of the UK's biodiversity will not be delivered by landscaping and prettification of the development site.

The government needs to signal the importance of natural capital to the corporate world

At the Environment Bank, currently the only brokers in habitat offsetting, we measure the impacts from a development in biodiversity units and convert this into a conservation credit requirement. Developers purchase these credits from the bank and this funding is invested in new areas of wildlife habitat by working with farmers, landowners and conservation bodies. The new wildlife habitat is created and then managed for 25 or more years according to a detailed, outcome-focused plan, with the bank paying the land managers of the new habitat.

We create bespoke offset sites or large-scale habitat banks across the country. Site selection is spatially literate ? that is, it ensures that projects are located where they will provide the most benefit to ecology and biodiversity ? and often connected to existing habitats. The developer is issued with a conservation offset purchase agreement and a conservation credit certificate. These are then presented to the planning authority by the developer as evidence that they have discharged their liabilities for ensuring a net gain in biodiversity.

Habitat banking brings together the objectives of the 25-year environment plan to:

- ensure net gains from development; and
- create a nature recovery network.

Net-gain funding of habitat banks through conservation credits removes 2 barriers nature conservation has suffered since the late 1800s, specifically lack of access to both land and finance. Land can be found through contracts with farmers, landowners and conservation bodies in the right place and at the right scale to make a major difference to biodiversity conservation, and these providers gain a revenue stream for restoring biodiversity.

Proposals to make net biodiversity gain a mandatory consideration for all planning authorities are currently out for consultation. This will provide a level playing field for developers, give them greater clarity and certainty, and send the right pricing signals to potential investors for a market in habitat offsetting and banking to enable significant investment in the natural environment, which ? according to the government?s [Ecosystem Markets Task Force](#) ? could be in the order of ?1.2bn per year.

Corporate natural capital accounting

The National Audit Office (NAO) and Office for National Statistics (ONS) have been working up metric-based assessments that corporate organisations can deploy to quantify, and hence understand, their businesses? reliance on the assets that nature provides. They are beginning to understand the risk to their operations of treating natural capital, including biodiversity, as a commodity with zero value, and also starting to realise that effective reporting on the role of ecosystems and biodiversity gives them market advantage.

It is likely that investor interest in a company?s position and its mitigation of impacts on ecosystems and biodiversity will scale up substantially in the next decade. Consequently, where impacts are identified, corporates may look to offset these by investing in projects that rebuild and restore natural capital assets by buying environmental credits. Third-party investors and landowners are therefore likely to bring forward ecosystem projects that can secure such corporate investment.

What is needed is for government to signal the economic importance of natural capital to the corporate world. Formal, comprehensive roll-out of the metric-based assessment methodology and the encouragement of its adoption by corporates would provide a consistent basis against which to measure a company?s exposure to the risk associated with natural capital loss. Through HMRC, the government could also require corporates to

advise of their impacts on biodiversity and natural capital through financial reporting regulations. Just as there is carbon disclosure by leading corporates, there could also be a natural capital or biodiversity disclosure initiative.

Corporates could buy environmental credits to invest in the natural environment. This investment could be used, for example, to create and protect large areas of new wildlife habitat; implement catchment-based flood alleviation wetlands; block up moorland drains to keep water on the hill and reduce peat discolouration in our water supply; plant and manage large tracts of broadleaved woodland to help alleviate the impacts of climate change and create wildlife habitat; and invest in managed rewilded landscapes that offer a range of ecosystem service benefits. The NAO and ONS could set standards and provide accreditation to establish a market and enable a system of tradable environmental credits. This trade could generate £3bn per year of investment for the natural environment, and third-party investment could also be attracted for land management interventions that support biodiversity and other natural capital assets.

Impact investment schemes – where investments are made in companies, organisations and funds with the aim of generating social and environmental impact alongside a financial return – were valued at \$114bn in 2017, so the market is significant. Projects that build the restoration economy in the UK could attract investment that addresses the deterioration of biodiversity and natural capital due to intensive farming. The investments could be made into projects that enhance and restore biodiversity as well as sparing land thanks to technological advances in agriculture or sharing land through sustainable interventions in farming. Green or environmental bonds could also be initiated by government to leverage further funding: the global green bond market has grown from less than \$1bn in 2007 to \$200bn in 2017, with an estimated \$443bn worth of outstanding green bonds in 2018 and a current growth rate of more than \$100bn per year.

Given these 3 funding initiatives and the potential for restoring biodiversity through habitat banks, we calculate that a 500,000ha nature recovery network could be created in 3-6 years and managed for 25 years, subject to the dynamics of scale-up. That would certainly transform the practice of biodiversity conservation in the UK.

Prof. David Hill, CBE, is chair of the [Environment Bank Ltd](#)

Further information

- Related competencies include: [Management of the natural environment and landscape](#) , [Planning and development management](#)
- This feature is taken from the [RICS Land journal](#) (March/April 2019)
- Related categories: [Agricultural and rural property](#) ; [Environmental matters](#) ; [Land and resource management](#)