What's Nature Worth?

This blog is based on a talk I gave in April 2024 at Cuckfield village's annual community meeting focussed on sustainable living. CPRE Sussex has been working with the communities of Cuckfield and Ansty to oppose an unsustainable 1,450 dwelling development proposed on a partly wooded farmland site of European and national landscape significance and low development capacity between the two villages, dubbed the Cuckstye scheme.

In this blog I want to focus attention on how nature could and should take a more prominent place in planning decisions. I have called this piece "**What's nature worth**?" I want to challenge you to look at the importance of nature in a different way.

Most of us tend to think of the natural world around us primarily in emotional and aesthetic terms. But I would like to invite you also to think about our environment in a different way as a utility, and its natural features as units of monetary value. Please travel with me on this short journey.

The Government's main rulebook for planning is the National Planning Policy Framework, the NPPF.

The NPPF tells us that the key to good planning is to ensure that plans, and their implementation through individual planning decisions, are **sustainable**: as beneficial to future generations as to ourselves now.

The NPPF also tells us that **sustainable planning** is like balancing a three-legged stool: it only works if it properly balances economic, social and environmental benefits and harms. That inevitably involves attributing value to each leg of the stool.

It is not hard to turn the economic implications into pounds and pence. It isn't usually that hard to do the same with social benefits (a new playground, say, or funding to keep a library open).

But how do you fairly balance the environmental leg of the sustainability stool against its economic and social legs when those two legs are convertible to economic value, but the third leg is only given an emotional value – in NPPF-speak: "great value" or "less than substantial value" for example? The resulting tendency is an undervaluation of the environmental component, as CPRE has all too frequently witnessed.

It is not that it cannot be done. Rather it is a matter of training ourselves – planners and others – to think differently about what our natural environment does for us: how its planned enhancement can better support humanity; what its loss or damage will cost us.

The principle of regarding our natural environment as a capital asset of economic value is not new, and is not a fringe idea: it has long been pioneered by Oxford Professor, Sir Dieter Helm, chair of the Government's advisory body, the Natural Capital Committee until it was disbanded in 2020[1].

The geography and nature around us, the wind that blows through, are assets: Our soils offer fertility and harbour many of the basic organisms and creatures on which the food chain depends. Our woodlands provide us with wood (obviously), they feed and shelter wildlife and plants, they absorb CO_2, they foster our wellbeing. Our rivers irrigate our crops and provide homes for multiple forms of life with whom we interconnect, and directly or indirectly depend upon. The oil and coal that may or may not lie in reserves beneath us has fuelled mankind's prosperity and way of life since at least the start of the industrial revolution.

Some of these natural capital assets – our air, our rivers – when used by people, renew themselves when we don't over-exploit or abuse them (which we do). They come for free. Their infinite yield at zero cost makes them especially valuable.

Others, once used, are lost to the planet for ever: the minerals and oil we mine, the natural gas on which we will depend to keep the lights on for some time to come. The value of these non-renewable natural capital assets is a function of their usefulness, rarity and irreplaceability. In passing, it also begs the question of how their exploitation should be allocated between us and those who follow us.

All these elements of nature directly or indirectly, in small or great ways, provide services to, and hence are of value to, people. Their economic value, and the value of the services they offer mankind, can both be measured.

Measuring what a given natural asset is worth – looking at it just as a commodity – enables us to embed the value of nature into our economy and our strategic development planning. It empowers planners to make more informed choices as to which assets are most valuable to conserve. and how they rank when measured against each other or other non-environmental considerations.

But can we really put a monetary price on what benefits our natural capital assets give us, and what their loss will cost us? Yes, we can. And the Government has started doing so. In 2019 HM Treasury commissioned a detailed review of the economics of biodiversity – the Dasgupta report published in 2021[2]; and their 2022 Green Book guidance on the appraisal and evaluation of Central Government projects contains includes a methodology to be applied on the valuation of environmental and natural assets.

The Office of National Statistics (ONS) now publishes an annual report, "England's Natural Capital Accounts" which values our natural environment, both as capital assets

and in terms of the annual value of the different components of the ecosystem services that nature provides to us humans.

The ONS's latest report tells us, for example, that the England countryside attracts tourism and recreation revenues of over £12.3b annually, and that the annual health benefits from exercising in the open are worth an additional £5.5b. The value of nature's vital role in absorbing greenhouse gases was nearly £2.2b last year alone.

Huge numbers, but they carry the imprimatur of the ONS. Don't ask me to explain the methodology that gets them to those numbers: it's all there on the ONS website. The take-away for me is that our natural ecology is of enormous value, even when looked at only in monetary terms. Destroying it comes with a big, big price tag.

Let me take the contribution that woodlands make to capturing greenhouse gases as an example of valuing the service that nature provides us. We can measure how much carbon a group of trees absorbs in a year depending on their type and age. There is an active market that allows polluters to buy so-called carbon credits from those willing to plant or manage woodlands. That is what carbon pricing seeks to do. Carbon pricing is the mechanism that aims to correlate the carbon we emit into the atmosphere from our activities to the cost of neutralising that harm by reforestation, carbon capture etc. The Woodland Trust, for example, operates a carbon trading scheme which pays an eligible landowner to plant new woodland.

Suppose that the Cuckstye site's woodlands and agricultural land might be able to capture up to 500 tonnes of CO^2 annually. The current carbon credit price for a tonne of carbon is about £51. Using those numbers, that land is providing an **annual** carbon absorption service worth £25,500. Capitalise that over, say, 30 years and its value for carbon absorption is over £750,000. Then add the capitalised value of the crops that can be grown on the best and most versatile soils on the site; and so on. Lose all that to bricks and concrete, and one begins to see the reality of the value of what would be lost there.

The valuation of our natural assets and the services that they provide to us is, and probably always will be, an imprecise science. But it is far better than the current position where nature is not often valued at all. And it is a science that will improve with time and more widespread acceptance of the value of its usefulness. It is the way ahead.

It is also true that the carbon trading market is limited in its scope and imperfect in its application. But the creation of a market between those selling opportunities to get rid of units of CO_2 and those generating it sets a price on that unt of CO_2. The more active and transparent that market, the more reliable the pricing mechanism should become.

The development of a carbon pricing and trading market, for all its imperfections,[3] is vital to the principle of putting a price on the harm that human activities cause to our atmosphere and climate. But, as its stands, it only catches those polluters who, like airline passengers, are required to compensate for the unmitigated greenhouse gas emissions of their aerial activities.[4]

Other polluters get off scot-free. No value is set on the harm that they cause. The cost to our atmosphere of building the Government's aspirational 300,000 homes p.a. – the cost in terms of CO_2 emissions of the concrete poured, the timber cut down, the new roads and pipes laid, the transport miles – that cost to our natural environment is not priced into the cost of the house.

That cost can be priced. But it isn't. So that cost is not weighed in the balance by those who decide whether a building development scheme is sustainable. It could be and, perhaps it should be, because it is a real cost, and one that we as a society are going to have to pay one way or another if we are to ever achieve net zero.

That said, it is not my contention that a financial valuation mechanism can ever be the only measure the importance of our natural environment. Misused, it would mislead one to the false conclusion that natural assets are always substitutable by manmade development: consider for a moment the implications of allowing any of those natural assets that are irretrievably lost or over exploited by allowing development. Can one sensibly rely purely on financial modelling to trade off a material, long term, degradation of our natural world for economic benefit: how much of the Amazon rain forest is it legitimate to cut down, hectare by individual hectare, for one-off logging and medium term ranching and plantation financial gains?

So, whilst financial modelling of nature is not, by itself, a complete solution, nonetheless when you can put a value on nature: what you gain by doing more of it; what it costs to lose or destroy it, then the way you make planning decisions will change and, pragmatically applied, change for the better. It's a tool whose usability is opening up; but it is still seen as unorthodox thinking, and so it remains absent from the tool-box of the planning system.

I don't pretend, in these austere times, that it is comfortable to be talking about paying good money to keep our climate healthy, and our natural surroundings flourishing. But we cannot just go on as we are if humanity is to flourish in any kind of currently recognisable form. Had we started taking the issues seriously when we should have done, the cost would have been spread over a far longer period. Equally, the longer we delay now, the steeper the penalty society will pay here and around the world in getting to net zero.

To sum up: the more that people come to realise the value of our woodlands and countryside not only on what I called earlier an emotional level, but as assets of real

and measurable economic value both for themselves and for the services that they provide to us humans, the greater the chance of their being protected and enhanced.

It may not feel like it at the moment with our cost of living crisis; but the reality is that in a longer term view the world is getting much richer (albeit not equitably so), and will continue to do so. And whilst we are getting much richer, we are making nature much poorer. We can afford to do much better and, if only for our own sakes, we need to do better by the planet that we share with the rest of the natural world. Sustainable planning has a crucial role to play in that essential transition.

Recognising the value to us of the natural world, and recognising that we are dependent on it, not owners and masters of it, is at the core of building a sustainable society.

Michael Brown April 2024

Note: This article is not written at the behest of CPRE Sussex. These are the author's personal views.

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1 Prof Deter Helm's book "Natural Capital, Valuing the Planet" (2016) is a great introduction to the subject.

2 https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review

3 My comments in this blog relate to the value of carbon trading as a mechanism for placing a value on a unit of carbon. I am not advocating such schemes as a solution to the disposal of man-made climate change. Dieter Helm has written a recent blog that is critical of the use of carbon offsetting as a "get out of jail free" card that risks perversely encouraging businesses to perpetuate their polluting activities: https://dieterhelm.co.uk/publications/in-the-name-of-net-zero-the-seductive-appeal-of-carbon-offsets/

4 The House of Commons Environmental Audit Committee produced a valuable report "Net Zero and the UK Aviation Sector" in December 2023 which addressed a range of actions (current and proposed), including carbon emissions trading and offsetting schemes and other demand management measures involving the aviation sector: https://committees.parliament.uk/publications/42703/documents/212154/default/