The expensive education of Britain's nature conservation community

There seems little unified thinking amongst UK wildlife groups, resulting in a lack of direction and shared vision. Where is the anger within the nature conservation community at the losses of species and habitats? Where is the challenge to the current approach which has delivered so little? This article suggests causes for the loss of direction along with some of the actions that are required to turn the situation around.

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"Like many applied scientists I started my career believing that the principal block to effective action was lack of scientific knowledge, and that once the true facts were known the appropriate action would follow almost automatically. Experience taught me that in most cases enough was already known to solve the problem. The difficult part was to explain the necessity for action to people with different points of reference and habits of thought, particularly when immediate self-interest made them unwilling to try to understand another point of view. By using the same words we kid ourselves into believing we mean the same thing."

Norman Moore *The bird of time.*[1]

It is now more than 20 years since the British Government signed up to the Convention of Biological Diversity[2], where two of the three main objectives were the conservation of biological diversity and the sustainable use of its components. The dizzy optimism of those days is long gone. How are we in Britain doing?

It is clear that we are experiencing an unprecedented decline and loss of the nature conservation (biodiversity) interest in Britain, and whilst there are examples of successes, these are few and far between. We are losing the battle to protect our flora and fauna. Several recent documents paint a sorry picture.[3, 4, 5]

Despite the evidence of loss and the fact that 78% of respondents to a recent survey "worry about changes to the countryside in the UK and loss of native animals and plants" people appear surprisingly indifferent to the fact that the current approach to protecting and restoring biodiversity is demonstrably not working.[6] Despite recent cuts, there are probably more people employed within nature conservation than ever before, in the statutory agencies, local authorities, utilities and voluntary bodies.

Considering these numbers, there appears to be very little consensus between nature conservation organisations, resulting in a lack of direction. Where is the courage and drive required just to stem the rise in wildlife losses? Actual restoration of that which has been lost is just a fantasy at present.

Working in nature conservation has some similarities to being a doctor. Both involve choosing to live a life of responsibility – and both have a choice as to how well to do that work.[7] As conservationists, our decisions are not usually life-and-death ones for humans, but they often are for other species. Affected plants, animals and fungi cannot bring legal challenges to defend themselves and although they are a vital part of the land, they can claim few rights by dint of ownership. It falls to the nature conservation community then, to make the case for the natural world and it falls to us to decide how well we do it.

A shared understanding? Nature versus environment

Many people think that nature conservation and protecting the environment are the same thing. Even within the nature conservation community this appears to be the case. Environment is important: it includes green space, water, air and carbon, all fundamental to life. Successful nature conservation is very different as it requires an understanding of the fine-scale processes taking place and the appropriate application of this understanding. Broad sweeping laws created to reduce carbon emissions may work for the environment, but make little real difference to flora and fauna. Indeed, they can actively work against nature conservation interests, such as the development of industrial scale wind turbines upon blanket peat or tidal barrages in estuaries. In these cases, it is usually (but not always) the nature conservation interest that loses out. Every-one understands the importance of clean drinking water but only a tiny number of people, by comparison, understand why open areas of grassland near to ponds are important for the newts, frogs and dragonflies using those ponds. This may be why many think of England as a green and pleasant land, despite the fact that the bulk of it is subject to industrial farming which has laid waste to the wildlife interest from the greater part of its surface area and why most of us rejoice in our grassy and heathy hills for the most part bereft of natural woodland cover, and drained and burned on an industrial scale. The importance of environment is largely understood by the majority; that nature conservation is something different, is not. Explaining that difference successfully will be an important step in reversing wildlife declines.

The cost of nature conservation

Nature conservation is often promoted as a mindset which is an obstacle to development or to economic growth. Chancellor George Osborne commissioned an inquiry into how many times environmental concerns prevented economic development.[8] This inquiry largely found that there was no case to answer. Indeed for example, RSPB Reserves across the UK contributed an estimated £66m and 1,872 jobs to local communities[9] - not to mention that RSPB itself employs over 2,000 staff. National Nature Reserves in England were estimated to contribute nearly 700 full-time jobs and £23m to the local rural economy.[10] Wildlife Trusts manage 2,300 nature reserves across Britain, while Scotland and Wales have more

than 100 National Nature Reserves (NNRs) with something like 2 million people visiting Welsh NNRs alone. The number of visits to National Parks increased from 66 million in 2009-10 to 78 million visits in 2012-13 and Local Nature Reserves were subject to an increase in the number of visits from 63 million in 2009 to almost 100 million in 2012-13.[11] Nature conservation is big business socially, if not necessarily financially. There is a job to be done in helping those who visit these areas understand that much of what they enjoy is derived from nature conservation, rather than anything else.

The use of agri-environment schemes in the wider countryside

The last 25 years has seen the development of Agri-environment Schemes, paying farmers and land managers to manage their land in ways that 'bring

Grey Partridge – their ecology is well understood but reversing declines depends upon persuading more land-managers to carry out appropriate land management.

Photo: Allan Drewitt

benefits' to the environment. The sums involved add up to billions of pounds across Britain and yet over this period we have seen the continued loss of much of the wildlife that this funding is intended to restore. Originally these payments were made under the Environmentally Sensitive Areas Scheme, then Countryside Stewardship, then by Environmental Stewardship in England, with equivalents in Scotland and Wales. For some of this period, the statutory nature conservation bodies also had the ability to make payments to secure management agreements, almost exclusively on designated nature conservation sites. Between 2007– 2013 something in the region of £3bn was spent on agri-environment agreements in England, Wales and Scotland.[12, 13, 14, 15] In England, for example, 70% of agricultural land is managed under some form of agreement. Given the length of time that agri-environment agreements have been in existence and the huge sums of money involved in securing environmentally sound management, we might reasonably expect this 70% of agricultural land at the very least, to be an effective refuge for wildlife.

Yet experts in the development of agri-environment prescriptions, still talk in terms of the 'potential' offered by the agri-environment approach.[16] For that potential to be realized, all the appropriate options need to be taken up by those eligible in the right places and tend only to work well when additional funding or specialist support is made available. In general, the most wildlife beneficial options are not taken up by land managers in the numbers required for the options to make a significant impact. The case of the grey partridge is an example: less than 2% of farmers have taken up options which incentivise the creation of beetle banks or conservation headlands.[17] If the once commonplace grey partridge is struggling, is it any wonder that we cannot prevent the decline of less familiar, less charismatic and less-easily identifiable species? This presents the fundamental problem with the agri-environment approach: the scheme that pays millions of pounds per year in competition with a subsidy system that offers billions of pounds, basically, just for being a farmer. Some people view agri-environment payments as a form of social payment – something which is allowed under EU rules, it is just that the UK chooses to use the money in this case, for payments to promote environmental benefits not social ones. If we wish farmers to live and farm in certain areas for social purposes, it would be more honest to have a public debate about this and make funding available explicitly for that.

In England alone, 943, species have been identified by the Secretary of State as nature conservation priorities.[18] Of these, 635 species have been identified as requiring agri-environment or woodland grant funding as an element of their conservation. We have an explicit requirement and an agreed method of delivery, but does this really withstand scrutiny? Published reports (e.g. [19, 20, 21, 22, 23, 24]) show that in the main agri-environment schemes have achieved little nature conservation benefit and other research has caused many to question whether agri-environment can really deliver the complex interactions that are required by many species and habitats.[25, 26] In the meantime, farmland wildlife continues to decline as the abundance and range of many of the characteristic species diminishes, heading the way of so many which have been lost altogether.

Alternatives for helping wildlife

How much better off would the nature conservation interest of Britain be if the amounts of money available under agri-environment schemes (projected as being more than £3bn in the new scheme under development) across Britain, were invested in purchasing, restoring and maintaining land to expand or establish new nature reserves (that could include working landscapes) or to enable us to learn more about the fundamental ecological requirements of the very many species we know little or nothing about? Imagine if government policy had been to use some of this money to purchase blocks of farmland across Britain where the emphasis had been upon producing wildlife benefits rather than maximum yields? This may well have provided improved safeguards for the likes of cirl bunting, stone curlew and corncrake. It would have also provided greater scope for restoring declining plants and insects.

This may be considered fanciful (not least because it may require re-negotiation with the European Commission on the rules as to how this money could be spent) but one need only consider the success stories of the last 20 years to see that recovery projects with dedicated project officers tend to be those which are the most successful i.e. red kites, large blue butterfly, reed beds and bitterns. Some of the successful projects such as red kites, ospreys and sea eagles were successful due to changing attitudes rather than habitat restoration. Similar examples of unequivocal nature conservation gain realised through agri-environment expenditure are the cirl bunting, stone curlew, corncrake, greater horseshoe bat and the marsh fritillary. These show the effectiveness of augmenting agri-environment expenditure with project officers and recovery projects paid for from other budgets to ensure that agri-environment spend was appropriately targeted and policed. Some argue in the defence of the agri-environment approach that at least the rate of decline amongst our flora and fauna has probably been slowed and the situation may be even worse in the absence of this mechanism. This is a distinct possibility, but it doesn't say much about an approach that is supposed to reverse wildlife loss and still fails to acknowledge that the approach itself is not fulfilling its intention.

Research funding and academia

In Britain we are blessed with an amateur naturalist movement with hundreds of years of history and recording effort which forms the basis of much of what we know about the wildlife of the country - in the past and now. Unfortunately, the gaps in what we know are considerable and filling them must be a priority if we are to take effective action on any basis other than educated guesswork or trial and error. The question is who should fill the gap? The increasing requirement to publish work in academic circles favours the 'breakthrough' and the 'new idea' rather than the establishment of new facts and there is a notable tendency for research councils to only make funds available for the support of new and innovative ideas. In general, the academic community is therefore unlikely to contribute significantly to the requirement we have to understand the life histories and needs of our native species. Aside from the difficulties in obtaining funding for students, the complexity of species and habitat interactions are such that many of the required studies need to be long-term, militating against funding and execution by students conducting

research for their doctorates. Academics are now being required to demonstrate the impact of their work. Might this provide the opportunity for them to choose to seek funding to allow them to better contribute to the restoration of declining or lost wildlife? Will the likes of NERC and the other big funding institutes take this on board or are they too obsessed with being new and novel?

The professional conservation environment

Not that long ago, if you admitted you worked in nature conservation you got a surprised look and the acknowledgement that you were clearly not in that job (if indeed they viewed it as a job) for the money. Somewhere along the line, as general awareness of the "environment" increased, nature conservation became respectable. As the sector grew, so the notion of an individual actually having a career became a possibility and then a reality. This in turn led to the importation of management 'skills' and production line processes along with, perhaps inevitably, the emergence of what I term as the Power-Point Conservationist. These people are self-styled 'enablers' and 'managers' – and usually have little technical or operational knowledge or experience or even interest - yet they can end up in positions of great influence. There is however, in my experience, a sizeable sub-section of this group who do have a background in the subject but have got to a position where they are comfortable and appear reluctant to provide the challenge to alter the status quo. This lack of leadership and understanding is corrosive and undermines our ability to develop actions to protect and restore our wildlife.

Everyone's a winner

Historically, much nature conservation activity has focused upon conflict – the fight for legislation worth the name, the fight to make sure that the legislation was followed and enforced and the fight to make people aware of the value of the natural environment. Most but not all of these battles, have taken place since the establishment of the National Parks and Access to the Countryside Act in 1949.[e.g. 27] It seems that people have largely forgotten these early struggles and how important they were in shaping many of the organisations found in nature conservation today. We are now entering an era where a return to the campaigning spirit of earlier times is required.

Targets – the good, the bad and the unintended consequences

We live in a world dominated by targets and they can be useful. The SSSI Public Service Agreement Targets forced a whole range of organisations across Britain to start addressing some fairly basic issues that up until then, had been ignored. Problems arise when the target deadline approaches. Invariably, new interpretations are introduced to ensure that the targets are thought of as having being met. But who checks that what has been reported is actually accurate and reflects the situation at the site level? The statutory agencies took different approaches to the reporting of the condition of SSSIs but who provided the quality assurance? In England, for example, I have yet to meet anyone who really believes the target of 95% of SSSIs by area to be in favourable or recovering condition by 2010 was really met, but how are we to know? The only people with the necessary scientific and land management skills to be able to probe what has been presented are the voluntary nature conservation organisations but they remain silent.

Many would ask "why revisit these old targets? It is all history" but these earlier targets are used as the basis for the next round of targets across Britain, in this case for example, the Biodiversity 2020 targets.[28] If the condition of habitats and species is actually different from that reported in 2010, what does this mean for the likelihood of reaching the 2020 objectives? In addition to questionable baselines, many of the targets repeat the mantras of the past that have clearly not delivered, such as maximising the area under agri-environment schemes. There is also an emphasis upon sustainable development and human health – important subjects and critical to society but should they be so prominent in documents that are about nature conservation? The few hard targets amongst the plethora of activities based on raising awareness by 2020 seem hopelessly ambitious in the light of evidence on the state of the wildlife in Britain. Do we really have to wait five years before there is acknowledgement that the targets were wildly unrealistic given the approach and resources allocated to achieving them?

Winning hearts and minds

It appears that nature conservation is no longer the central driver for the statutory nature conservation agencies. Their funding is increasingly being cut and they are subject to ever more political control and objectives that are in conflict with each other. Who then should be taking responsibility for championing the cause of nature conservation? For the time being at least, the voluntary sector is where the hope for our flora and fauna lies, but these groups have become too reliant on state funding with many also being badly exposed when funding was cut following the recent global financial recession. In addition to the financial reliance, the voluntary sector has seemingly become too soft, apparently unwilling to challenge government and the agencies providing funding, or speaking out on matters which might cost them existing supporters.

To be fair, the voluntary bodies do periodically get together to produce a review that re-confirms that wildlife is largely in free fall. But this unity is all too short-lived. The only way to change government thinking is by galvanizing people, yet the voluntary sector is failing to do this. Its combined membership in the low millions is small compared to the number of people that surveys tell us are interested in wildlife and the environment. New and innovative ways need to be developed to engage this apparently interested and willing audience. The public response to the proposed sell-off of the nation's forestry land reaffirmed that people out there do care, although it may be that they care about the loss of dog-walking facilities rather than loss of access to wildlife: much more effort needs to be spent in engaging with the variety of people who use these sites. Perhaps the secret is not to try and recruit members but to persuade people to play a role in lobbying government for change. The use of social media in forcing changes in how supermarkets operate in relation to the sale of fish may provide clues as to how to tap into and utilize the wider public.

The military know that no amount of smart-weaponry will replace size 12 boots in establishing dominance over a piece of ground and the nature conservation sector must re-learn that no amount of rhetoric about partnership, balance or outcomes will replace the protection and security provided by ownership of land. One way to

Large Blue Butterfly – an example of where successful restoration has been achieved through the use of project officers and targeted work.

Photo: Tim Melling

gain influence is to increase the sizes of existing reserves and to consider purchasing land strategically either to increase connectivity or to trade at a later date.

It would be easy to denigrate the outgoing coalition government's record in relation to the environment but the lesson is that we cannot afford to put our trust in politicians of any party.[29] Regardless of which government is in office, it should be anticipated that in future, the pressure to promote economic growth of some sort will trump the needs of the environment and that when a developer wins, it is for-ever but when the conservation argument wins, it is only until the next development comes along. The nature conservation sector needs to develop and implement a strategy for dealing with this rather than rely on weak environmental impact assessments and the vague use of sustainable development commitments by the business and construction sector.

Where do we go from here?

We need to start planning now to create a scheme that will deliver measurable and significant nature conservation gain and for this to happen, there needs to be a fundamental rethink of what the model for land management should be. Regardless of Britain's future in or out of Europe, it is clear that from a nature conservation perspective, the existing Plan A consists of hoping EU legislation will be enough to protect internationally important sites and that agri-environment will deliver wildlife recovery. There is more than a strong argument to say that both are failing so what is Plan B? If for example, the UK were to come out of Europe, it seems unlikely that demarcating a wildlife area as a Site of Special Scientific Interest will be enough to provide adequate protection. Where would the large-scale funding come from? The Heritage Lottery Fund is now starting to look at funding of nature conservation projects but make no mistake, it will only be interested in bespoke proposals. In a world of weakened site protection and reduced funding (which may equally be the future within the EU as well) what should the strategy be for protecting and restoring the nature conservation interest of the nation?

- People are starting to recognise the importance of expressing the value of the environment and wildlife in economic and non-economic terms and the real cost of destroying it.[30] But in the meantime we need to do the following:

- Harness people power to slow this loss and buy time for the development of a new approach;

- Connect with people of all ages and backgrounds, not in the future but now;

- Promote skills such as advocacy which seem to have largely fallen by the wayside and allow people to be passionate without fear of being mocked;

- Develop a social environment that encourages constructive challenge to colleagues, decision-takers and politicians without fear of rebuke.

Could this really happen? I believe so. Whilst humans are clearly the most destructive organisms on the planet, we do have the capacity to appreciate a situation and make radical changes to our behaviour. Most obvious are pesticides, acid rain and the ozone layer. These examples are largely environmental ones where broad-actions can have significant positive outcomes. Nature conservation is inherently more complex where solutions may need to be intricate and certainly bespoke.

Leadership questions

To my mind, whether we restore our lost wildlife or not, is largely in the hands of the voluntary sector. It may appear unfair to be pushing the responsibility in this way but voluntary bodies are the only ones with the technical expertise and the flexibility to provide the required leadership. They are the only ones that collectively have enough weight to provide challenge to the government of the day and who can provide a robust framework for the development of informed thinking. To do this successfully, they will need to examine themselves critically, to ensure they have

the right people of the right quality providing the drive and clarity of vision that is required. They will also have to harness a public that is jaundiced about messages on loss of wildlife but who are still, for the present, interested.

To make any progress will at the very least require addressing the comment by Norman Moore at the start of this article. It is time to drop the flowery rhetoric of recent decades and start putting more effort into ensuring we do mean the same thing and this shared language must also be understood by the public as well.[31] The challenge is immense. There will be plenty who read this article who are paid to address this challenge, and they need to take the rest of us with them. We could do worse than to return to Atul Gawande, who, whilst writing about the medical world, offers us lessons that apply equally to all walks of life: "Better is possible. It does not take genius. It takes diligence. It takes moral clarity. It takes ingenuity. And above all, it takes a willingness to try".[7]

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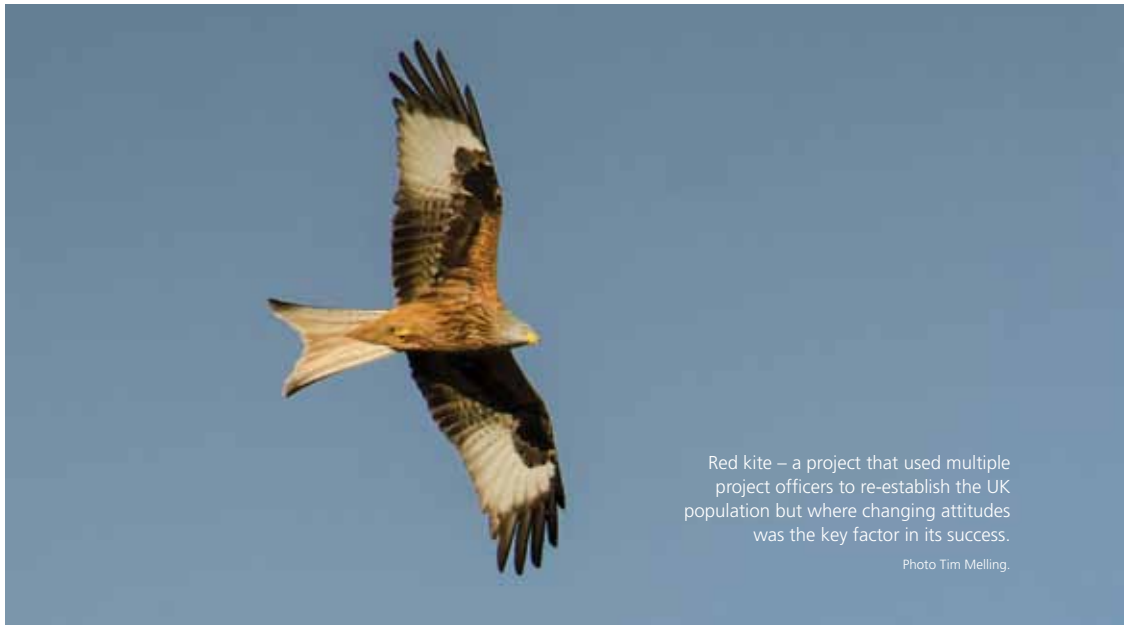

Red kite – a project that used multiple project officers to re-establish the UK population but where changing attitudes was the key factor in its success.

Photo Tim Melling.