Annexe: The State of Nature

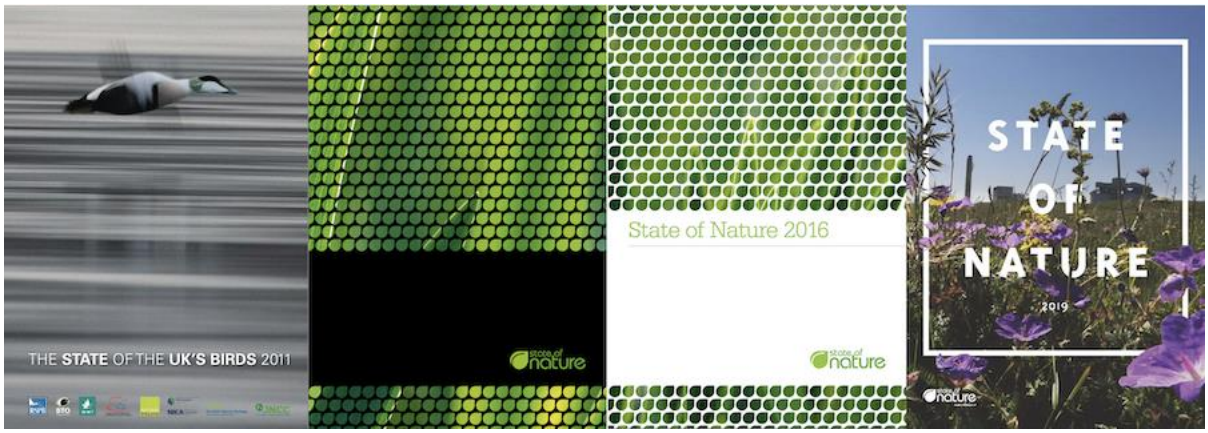
(Annexe to an essay on nature and farming inspired by Land Healer, introduced in the blog Revolution in Taliban Alley; Chris Rose. chris@campaignstrategy.co.uk September 2022)

While the main NGOs did not launch significant campaign efforts about farming before or after 2000, they did spend a great deal of effort detailing the decline in nature, and gradually acknowledged the impacts of agriculture in more specific terms.

In 2011, two years after the NE review on AES, a consortium of nature and science groups published it's 12th edition of The State of The UK's Birds. They wrote:

'both farmland and woodland indicators fell to their lowest ever levels in the UK, driven by further declines in habitat specialists such as turtle doves, grey partridges and corn buntings (farmland) and willow tits, lesser spotted woodpeckers and lesser redpolls (woodland)'

The Farmland Birds Indicator had fallen to 51% of its 1970s level. Species included in the 'Common Birds Census' because they were widespread, had become localised (eg the Bullfinch) and many were now rare enough to be regarded as prize finds by birdwatchers (eg Yellow Wagtail).



Reports tracking the state of farmland birds and nature in general 2011 - 2019

Consortia of conservation, science and natural history groups produced dense, fact-filled ***State of Nature*** reports in 2013, 2016 and 2019. A huge and increasing amount of work went into these reports. In 2013 twenty-five organisations were involved, in 2016, fifty, and in 2019, seventy-eight.

The *State of Nature* reports cover all species groups from fungi to insects, mammals and flowers, going way beyond birds and farmland but quite what they were trying to achieve is not that clear.

"Should I be Worried?"

In my view, if there is an intention to stimulate action, the audience tests for any such benchmarking report mean it should answer questions such as: “should I be worried?”, “is it working or not ?”, “are things getting better or worse?”, leading to “so what should be done” and “what can I do?” This is about giving the meaning to the data, not just presenting the data. An alternative strategy is to just present the data and then produce another document which expresses and explains a point of view answering those questions. Instead, although they are impressive documents, all that got a bit mixed up, especially at the start.

In 2013 the Introduction to the first *State of Nature* stated:

‘Our countryside has lost millions of the skylarks that herald the spring dawn, Duke of Burgundy butterflies have disappeared from our woodland glades, and even hedgehogs struggle in our gardens’.

That bit of slightly purple prose definitely said “I should be worried”. But it was immediately followed by:

‘But there is good news too; otters can be seen in our rivers once again, red kites and sea eagles soar where they have been absent for centuries and new species are pushing north from continental Europe’.

So now I’m not so worried. I’ve been given an emotional off-ramp from the problem. And with three bad things mentioned followed by three good things, the emotional weigh-in equalises at zero (even if a careful reader might ask whether ‘species pushing north’ really deserved to be on the ‘bad’ rather than the ‘good news’ side of the ledger).

If the purpose of publishing was to motivate an audience to make a difference, or to signal an agenda which would make a difference, instead of using the bad-news-and-good news formula. It could have contrasted the miserable plight of the Skylark, Duke of Burgundy Butterfly and Hedgehog, with the happier situation of the Otter, Red Kite and Sea Eagle. and identified what about the latter was being denied to the former. That could have helped set an agenda for a call to action, as in a campaign proposition. But there being no campaign for action across the consortium, the selection of examples was perhaps functionally random.

When it came to farming, the 2013 report stated (my emphasis):

*‘… By identifying the harmful impacts of this intensification, it is possible to work with farmers to find solutions ... Progress has been made with wildlife-friendly farming, but there are still many challenges that must be addressed, including neonicotinoid insecticides, which **may** be reducing the breeding success of bumblebee colonies’*

which could perhaps have been written by Defra.

Each of the reports had ‘Headlines’. On farming, the 2013 publication *State of Nature* headlines included:

'farmland birds and butterflies have decline substantially since the 1970s and 1990s respectively … 60% have decreased and 34% decreased strongly … 14% of all farmland flowers are on the national Red List'

and

'many of the changes are linked to shifts in farmland management, particularly those intended to boost productivity ..'

… birds and bats have benefitted from conservation action, particularly through agri-environment schemes. Despite this most farmland species have failed to recover from the declines of recent decades'.

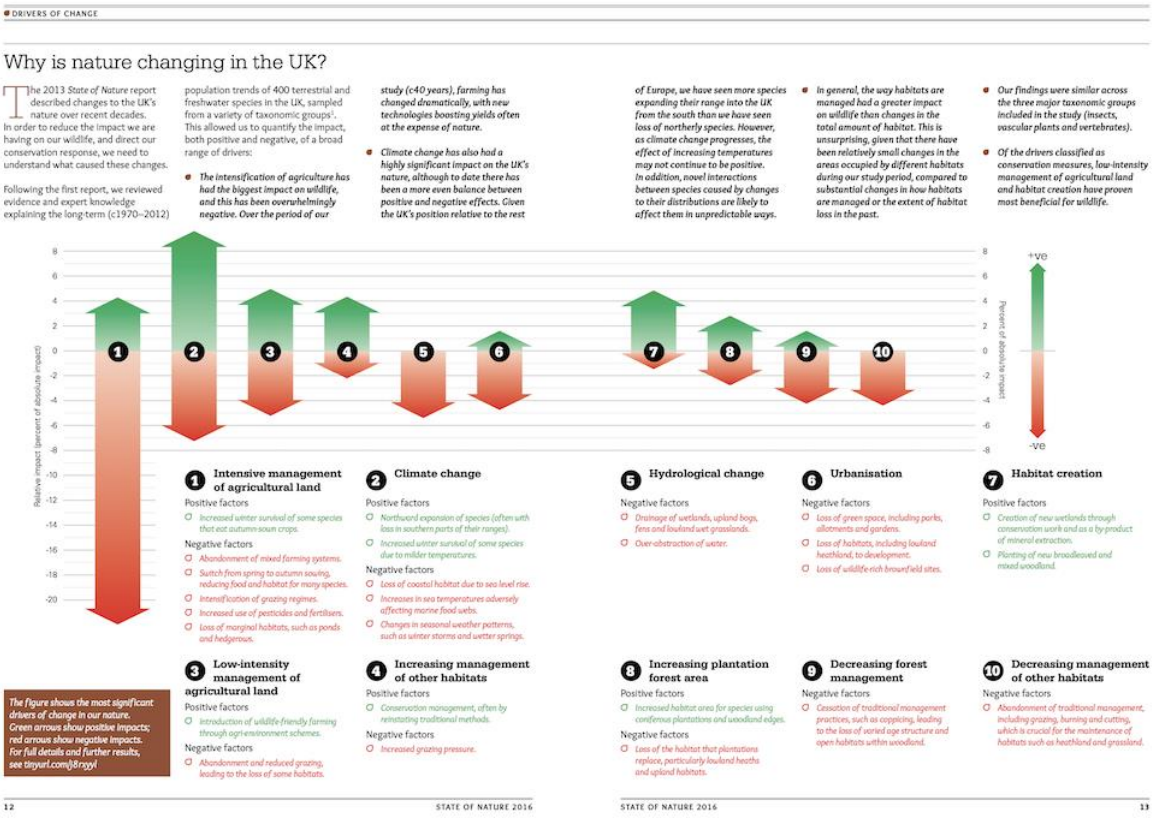
It's unclear if this was intended as a motivational message to do something but if it was, it was undone by the following statement:

But it's not all bad news. Some species have stabilised after declines during the second half of the 20th century, including the brown hare and several species of bat. There is also evidence that some species, including the greater horse-shoe bat and at least four rare farmland bird species are beginning to recover, although there is a long way to go before they return to earlier levels. All of these have benefited from special conservation programmes.

So should I think that the good news compensates for the bad? Is 'stabilising' good enough? Is 'four rare bird species beginning to recover 'significant, or are these the only species beginning to recover? What's the viewpoint of the report? It wasn't very clear.

In 2016 the second *State of Nature* put a greater emphasis on agriculture, clearly stating in the Headlines:

'Many factors have resulted in changes to the UK's wildlife over recent decades, but policy-driven agricultural change was by far the most significant driver of declines'.



Drivers of change, identifying agriculture at the top of the list in the second State of Nature report, 2016.

Page 12 and 13 featured a large diagram (above) of the main causes of nature loss and stating:

… 'we reviewed evidence and expert knowledge explaining the long-term (c1970–2012) population trends of 400 terrestrial and freshwater species in the UK, sampled from a variety of taxonomic groups . This allowed us to quantify the impact, both positive and negative, of a broad range of drivers …

'*the intensification of agriculture has had the biggest impact on wildlife, and this has been overwhelmingly negative. Over the period of our study (c40 years), farming has changed dramatically, with new technologies boosting yields often at the expense of nature'.*

"We" primarily meant the RSPB which played a key role in co-ordinating and editing the *State of Nature* reports and the review paper. The latter involved nineteen scientists led by Fiona Burns and Mark Eaton from the RSPB, and used information assembled for the 2013 *State of Nature* report. Published in the journal Plos One, the title summarised the main conclusion: *Agricultural Management and Climatic Change Are the Major Drivers of Biodiversity Change in the UK*.

Of the two, intensification of agriculture had the greater net-negative effect (as a driver it was 3% positive and 20% negative). Intensifying farming outweighed the damage caused by urbanisation (3% negative) by almost seven times.

Table 1. Broad drivers of change on UK biodiversity, 1970–2012, that accounted for two percent of absolute impact or greater. Results are presented using all strengths of evidence available and weighting species in the three higher taxonomic groups equally (insects, plants and vertebrates). Full results are given in S1 Appendix.

Broad driver, with direction	Impact score[1]				Number of species impacted (number excluding low quality evidence given in brackets)
Intensive management of agricultural land	23	[-20	|	+3]	171 (64)
Increasing climate change	14	[-6	|	+8]	152 (67)
Low-intensity management of agricultural land[3]	8	[-4	|	+4]	61 (44)
Hydrological change[4]	4	[-4	|	+0]	49 (10)
Increasing management of other habitats	4	[-1	|	+3]	37 (17)
Decreasing forest management	3	[-3	|	+0]	56 (11)
Urbanisation	4	[-3	|	+1]	43 (16)
Habitat creation	4	[-0	|	+4]	38 (11)
Increasing plantation forest area[4]	3	[-2	|	+2]	37 (11)
Decreasing management of other habitats	3	[-3	|	+0]	32 (9)
Increasing farm area	2	[-2	|	+0]	40 (5)
Driver from outside the UK	3	[-2	|	+1]	21 (12)
Invasive non-native species or problematic species	3	[-3	|	+0]	30 (15)
Increasing air pollution	2	[-2	|	+0]	23 (9)
Increasing hunting, population control & collection	2	[-2	|	+1]	19 (10)
Increasing forest management	2	[-1	|	+1]	20 (8)
Decreasing hunting, population control & collection	2	[-0	|	+1]	11 (9)
Decreasing human disturbance	2	[-0	|	+2]	11 (2)
Total Impact[2]	**100**	**[-65**	**|**	**+34]**	

1: Impact scores are expressed as a percent of absolute impact across all drivers and species. The absolute impact is given for each driver, followed by a break down into negative and positive impacts

2: Impact scores presented here do not sum to 100 as drivers with <2% impacts were excluded

3: Broad driver where the supporting evidence is stronger than average

4: Broad driver where the supporting evidence is weaker than average.

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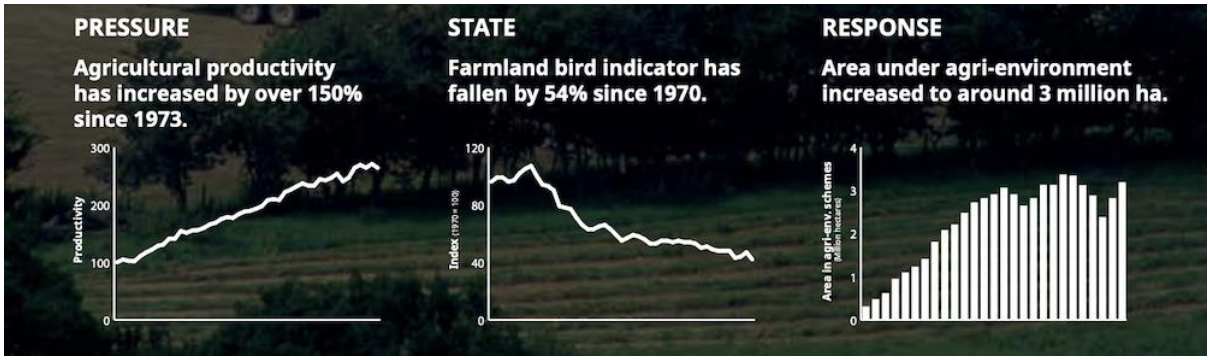
The 2016 Plos One paper by Burns et al identifying agricultural intensification as the biggest single cause of loss of nature in the UK since 1970.

Although it was a scientific paper, the Plos One study was more pointed than the State of Nature reports, beginning: 'Despite the efforts of conservationists, and widespread public support for conservation action, biodiversity continues to be lost and is predicted to decline further by 2020'.

The 2019 *State of Nature* had a change of tone. Gone were David Attenborough's mildly concerned introductions used in 2013 and 2019, to be replaced by numerous statements from young people, and it was unequivocal: 'There has been no let-up in the net loss of nature in the UK'.

At the top of the Headline 'pressures' came farming: 'Agricultural productivity, linked to the intensification of land management and the decline in farmland nature, is still increasing, although with government funding some farmers have adopted wildlife-friendly farming'.



from State of Nature 2019

Over four pages (19 – 21) it gave a much clearer explanation of how agriculture had changed and was impacting nature. Fertiliser use had peaked in the 1980s but (citing Goulson's work) toxicity and variety of pesticides used had increased. The Farmland Bird Index had fallen to 54% and AES had shown 'little evidence of benefits to species occupying in-field cropped habitats'.

A Missed Opportunity

Having worked on my share of such reports I agree they are necessary as 'statements of the case' and 'matters of record' but unless they fit into a strategy which can be better progressed to it's next objective by their publication, I am sceptical about what they achieve in themselves. Unfortunately the sheer effort of assembling them makes that very hard for contributors to accept: they feel valuable simply because of the effort heuristic. Which of course leads to a sense that we have achieved something by publishing them.

None of the reports have a clear 'call to action' which suggests that there was no joint plan to use them as part of a change strategy, at least not one that used the reports to engage an audience to do something specific. Although self-described as a 'rallying call', there was nothing to rally to. To that extent they were a missed opportunity. They would have made a great springboard for one or more national campaigns, not least on farming. Perhaps the next one will.

In many ways the careful encyclopaedic *State of Nature* reports are the antithesis of *Land Healer* with its personal, idiosyncratic examples and trenchant opinions. One can see more than a suggestion that the *State of Nature* authors negotiated the language and content of the reports and only 'went so far' as 'the science' allowed, which may have meant RSPB science papers.

As a result they ended up lagging well behind what the most concerned independent scientists were saying, for example on neonics and insect declines. That's a criticism often made of the IPCC climate science process but the IPCC effectively has to negotiate what its reports say with governments, not among NGOs. And to be fair to the IPCC, it has also worked out how to communicate concern and urgency while also dealing with levels of uncertainty.

It's also quite possible to express opinions and call for action despite gaps in definitive proofs. That's why the EU has made great use of the Precautionary Principle. The conservatism of the *State of Nature* process was self-imposed.

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