Habitat pressures and species loss around Moorway Lane, Sandford Orcas.

Concerns presented by K. Creswell Dip. Herb. Med. MNIMH to Queen Thorne Parish Council on 11th July 2022

It is with no pleasure that I am here, bringing these issues to you but feel it's important to share what I have been witnessing. I find what I am about to tell you deeply upsetting but I shall make the following information as concise and un-emotive as possible. Before I start, I want to say this is not a finger pointing exercise but a call to attention and a request to try and reverse this damage together.

I feel I am well placed to comment on the following, as due to my own set of personal experiences I have an overview which most people are not privy to. As many of you know, I have spent the best part of 20 years living under canvas, as part of the natural world and unencumbered by many of the distractions of modern life. Further to that unique experience I am also highly medically trained, and that training included study of ecology and climate science - so I have the benefit of direct observation as well as scientific understanding.

Since 2003, I have spent most of my time living and working along side the wildlife in the valley of which I am to speak, which has given me the opportunity to closely observe the impact of changes and the trends of nature in that immediate vicinity over 19 years.

During the last 5 or 6 years I've become increasingly concerned about habitat damage and species loss in our parish and I'm going to set out the following issues to demonstrate why.

- The thin end of the wedge was the allowance of treated waste to be discharged in to the water course along the side of Moorway Lane. This was permitted by the Planning authority at the time, but I believe the laws have changed since then [1]. Since I brought it to their attention, it is fair to say that, to their credit, the current owners are doing their best to keep pollutants from that system to a minimum, but even so that water course is no longer the clean wildlife water supply it once was. That same water course is also influenced by applications to fields higher up the side of the valley, due to the land drains which filter into it.
- -The first major event which noticeably altered the local ecology correlated with the initiation of heavy agrochemical use on land in the valley. In 2017 a glyphosate-based product was applied in large quantities and following this there was a catastrophic reduction of amphibian numbers in the area within a short time frame a booming and healthy amphibian population was decimated I saw what I would estimate to be an over 90% loss of amphibians. On my adjoining property, which I manage to promote biodiversity, I had been achieving notable success with a year on year increase in visible numbers. Following the chemical application I lost all frogs and most toads and newts. 5 years on numbers haven't even got close to recovering amphibian population has remained worryingly low since that incident. You also may have noticed the massive drop in frog migration patterns in the area since then. [2]

It's important to note that glyphosate products don't only have an effect on amphibians. There is increasing, emerging evidence which indicates glyphosate contamination as a causal factor in many human health conditions, particularly serious neurological, reproductive, carcinogenic, digestive and endocrine disorders. [3]

- Further to this I have also noticed, over the last 6 years or so, a loss of aquatic life in the stream which begins on Patson Hill, runs through the valley, over the ford on Moorway Lane and into Jarrards. For many years after buying my land I utilised that stream for water collection and willow soaking - there were always high levels of aquatic life - most notably fresh water shrimps and english crayfish - even as recently as 2013 I would always find them. The stream was clear and life-filled and now it's silted up and suffering from the effects of pollution.

I had been noticing what seemed like a slight decline in the health of the stream, since around 2015/16. But in the summer of 2019, I became so worried that I reported my concerns to neighbours, the Parish council and the environment agency - prompted by what appeared to be some sort of chemical slick upon the surface of the water. No action was taken but at that point I did attempt to instigate a group to improve the quality of the stream. The environment agency did offer to provide me with a management plan, but despite several reminders they did not. Then lock down happened and everything stopped - except the pollution.

In the summer of 2020, a pollution incident was brought to the attention of the Parish Council, following a third parties observation of dead aquatic life in the stream as it entered Jerrards. No action was taken.

In the summer of 2021, a parish stream monitor in Sandford Orcas contacted the environment agency regarding what's known as a 'fish kill incident' (in this case crayfish) in the stream which runs from Bow Don hill, through the village, so the other stream. The stream monitor did not report the incident to the Parish council as they felt it wasn't a priority. Again, no action was taken. [6]

- As the Parish council is aware, at the beginning of June in 2020, there was an extreme incident of what can only be called wildlife crime. Hundreds of breeding larks' nests were ploughed up by a local farmer. They were aware that the birds were breeding and yet chose to destroy every nest in the field - not even leaving a tiny strip exempt from destruction. You should know that although numbers seemed abundant in that immediate locality, nationally numbers of sky larks have declined massively and larks are on the IUCN red list - listed as threatened, with advice given that "this species requires wide-scale conservation measures" (IUCN, 2018). Despite witnesses to this action and proper channels being followed, including the parish council, landowners, police and RSPB, no action was taken - it would appear that farmers can act with impunity. Wild bird numbers are suffering globally and need all the help they can get - they certainly don't need their rare breeding grounds destroyed in the name of profit margin. [4]. In the valley where I live I have also witnessed, and brought to the attention of those who do it, the mechanical flailing of hedges during the nesting season and I have witnessed prematurely fledged hedgerow birds being killed as a consequence. [61]

This year the dawn chorus around me has not happened -yes, there are still birds but not a patch on a few years ago - I have no means of measurement apart from my ears but by comparison to previous years it is eerily quiet.

- During lockdown in the autumn of 2020, I was alarmed by very loud rifle shots, at irregular intervals, at night, sporadically over a few weeks, close to my home, which I found extremely distressing. The following autumn, 2021, when the shooting began again, I investigated and discovered that neighbouring land owners had been persuaded to partake in badger culling and had been advised to keep it confidential. Whatever your personal views are about the integrity of the science on which these culls are based, or the cruelty that free shooting causes, the law still states that consultation with stake holders should have happened before instigation of shooting. As the owner and manager of a small holding and nature reserve close by to established and historic badger setts I am a stakeholder, the woodland trust is a stakeholder, the village is a stakeholder, no one owns the wildlife we life side by side with in this valley, and none of us were consulted. [5]

I've previously brought to the Parish Council's attention my worries about declining bat numbers.

It is also clear, indicated by the red kites which follow the tractors around, that the intensification of agricultural activity devastates small rodent populations, which has a knock effect to the wildlife which feeds on them, for example the owls which are a feature of our parish.

Intensification of agricultural practices also impact hares, another much loved feature of this area, whose leverets wait in scrapes for their parents to return, during silage cuts.

This year I have witnessed the illegal hunting of foxes as hounds have been out of control on my property. Personally I rely on the foxes to keep rabbit numbers down - far preferable to man-made myxomatosis. [6]

I think that, with this information, I have demonstrated that in this area we are witnessing multiple pressures on habitat which are causing the start of a rapid and alarming loss of all sections of our wildlife.

I had the misfortune to grow up in a rural village which had a motorway built through it, and I have seen first hand what localised and irreversible ecological breakdown looks like. I have no wish to sound melodramatic but what I've just described is what start of ecological breakdown looks like.

There are a few things there - but what really concerns me is that no one seems to understand the serious nature what's going on. So, I am bringing this to your attention now.

As I've just described, several incidents have been reported to the Parish Council yet, when I read through all the minutes since 2016, none of those reports had been minuted, none of them, and I don't understand why.

These events needed to be recorded - even if the Parish Council feels it can take no action these matters need to be recorded for posterity. Furthermore, I would suggest that by choosing to turn a blind eye the impression the parish council is giving is that is that no one cares.

I don't believe that there is anyone not aware of the global environmental crisis we are in. I know that there are people in the village that are concerned about the plastics in the ocean, and deforestation of the Amazon, and it feels disempowering that we can do nothing. But here, on our own doorstep, in our own home we can do something.

I respectfully request that the Parish Council demonstrates that the parishioners of Queen Thorne do care. I respectfully request that the Queen Thorne parish council, on behalf of residents of the parish, take the following actions:

- **Firstly:** Ensure that concerns about environmental impact are minuted as a record and that the omission of the previous reports, which I have just mentioned, is rectified by the inclusion of them all in the minutes of todays meeting. I can provide paper trails if necessary.
- -Secondly: I would encourage the Queen Thorne Parish Council to instigate a 'Nature Watch' sub-committee, the aim of which will be to protect and promote bio-diversity within the Queen Thorne parish. Ideally the 'Nature Watch' sub-committee will be made up by a variety of people from each of the villages as we all have our own specialised knowledge of where we live. Any conflict of interest should be declared. Reports from the subcommittee would be provided to the parish council so that the parish council can use the work of this sub-committee as a research tool to enable more effective decision making.
- -Thirdly: I propose that the parish council uses a small amount of its environment budget to invest in water testing equipment so that we can start regularly monitoring the health of the water courses with in the parish. This is outside of the remit of the current stream monitors so I suggest that this will be the first task of the 'Nature Watch' subcommittee.

Moving forward, I also suggest the consideration of working with existing and recognised Wildlife Groups with a view to recording and monitoring the state of nature within our parish.

I expect that this level of initiative and leadership by the Queen Thorne Parish Council will be extremely popular among residents but there may be also be people who will find these ideas a threat. I want to reiterate this is not a finger pointing exercise. In order to protect and maintain the rich benefit of wildlife that makes our valleys so special we need to work together, with out divisiveness.

Further reading:

[1]

Gov.UK (2021) Guidance: General binding rules: small sewage discharge to a surface water Available: https://www.gov.uk/guidance/general-binding-rules-small-sewage-discharge-to-a-surface-water#existing-and-new [accessed 02/07/2022]

[2]

Bruhl et al (2013) *Terrestrial pesticide exposure of amphibians: An underestimated cause of global decline?* Available: https://www.nature.com/articles/srep01135 [accessed 27/02/2019]

[3]

Seneff S (2021) Toxic Legacy: How the Weedkiller Glyphosate Is Destroying Our Health and the Environment Chelsea Green Publishing

ECDC Risk assessment on the impact of environmental usage of triazoles on the development and spread of resistance to medical triazoles in Aspergillus species Available: https://ecdc.europa.eu/sites/portal/files/media/en/

publications/Publications/risk-assessment-impact-environmental-usage-of-triazoles-on-Aspergillus-spp-resistance-to-medical-triazoles.pdf [accessed 27/02/2019]

Fishel F Pesticide Toxicity Profile: Triazole Pesticides1 Available: https://edis.ifas.ufl.edu/pdffiles/PI/PI10500.pdf [accessed 27/02/2019]

Peyton L, Gallagher S, Hashemzadeh M (2015) *Triazole antifungals: a review* Available: https://www.ncbi.nlm.nih.gov/pubmed/26798851[accessed 27/02/2019]

Ribas et al (2016) Is the emergence of fungal resistance to medical triazoles related to their use in the agroecosystems? A mini review Available: https://www.sciencedirect.com/science/article/pii/S1517838216305342 . [accessed 27/02/2019]

[4]

IUCN (International Union for Conservation of Nature) (2018) *IUCN Red List of Threatened Species* Available: https://www.iucnredlist.org/species/102998555/132039889#population [accessed 02/07/2022]

EU Wildlife and Sustainable Farming Project (2009) *Alauda arvensis factsheet - SWIFI.pdf* Available: https://ec.europa.eu/environment/nature/natura2000/management/docs/Alauda%20arvensis%20factsheet%20-%20SWIFI.pdf [accessed 02/07/2022]

BirdlLife International (2021) *European Red List of Birds 2021* Available: https://www.birdlife.org/wp-content/uploads/2022/05/BirdLife-European-Red-List-of-Birds-2021.pdf. [accessed 02/07/2022]

[5]

British Veterinary Association (2022) Analysis of the impact of badger culling on bovine tuberculosis in cattle in the high-risk area of England, 2009-2020 Available: https://bvajournals.onlinelibrary.wiley.com/doi/full/10.1002/vetr.1384 [accessed 02/07/2022]

[6]

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) (2019) Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystems Available: https://onlinelibrary.wiley.com/doi/full/10.1111/padr.12283 [accessed 02/07/2022]

NBN (National Biodiversity Network) (2019) State-of-Nature-2019-UK-full-report Available: https://nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-UK-full-report.pdf

IPCC (Intergovernmental Panel on Climate Change)(2022) Climate Change 2022 Impacts, Adaptation and Vulnerability - Summary for Policy Makers Available: https://www.ipcc.ch/report/ar6/wg2/downloads/report/lipcc_AR6_WGII_SummaryForPolicymakers.pdf [accessed 02/07/2022]