



ENVIRONMENTAL IMPACTS AND THE RESPONSE OF WILDLIFE TO COVID-19

A presentation on current
governance responses and
how to move forward

'This is a pivotal moment to build a safer future for people and the planet. Now is the time for transformative action to protect natural ecosystems in order to reduce the risk of future pandemics and build towards nature positive, carbon neutral, sustainable and just societies.' (WWF, 2020)

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We've been bombarded with headlines about how different countries are managing wildlife during the pandemic, with a huge response from the public when those actions are found to be detrimental to the wellbeing of the animals.

With the rate of change and relatively little quantifiable research data available, it can be difficult for policy-makers to make informed decisions.

However emergency action plans do not necessarily need to be so specific; regardless of the outbreak, a framework on how to best protect both population and wildlife should already exist, particularly for organisations and industries that frequently handle animals on a large scale (PTES, nd).

Arguably the transfer and rate of the virus calls for more urgent action, and where global finances are already suffering it is life which can be determined as 'expendable' that must suffer the hardest blows- but is this based on scientific data or economic interest? What is the key focus and what is really being safeguarded when these decisions are made?



Last month Denmark culled over 17 million mink after finding some were carrying a mutated strain of COVID-19 that had been transferred to 12 humans (Kevany, 2020). Now it has been determined this action was illegal and the disposal of their bodies poorly managed to the point they are emerging from shallow graves (Kessler, 2020)

Most of the world was unaware of the pangolin until COVID-19; now they have become the poster child for the fight against wildlife markets and illegal trade, with China upgrading the species from second class to first class protected status (Winn, 2020)



One of the issues is that the extent of action from individual to a global level has ramifications that are not fully understood until it is either too late or extensive damage has already taken place.

Similarly, unchanged practices are also having an effect, so it's challenging to know where to even start.

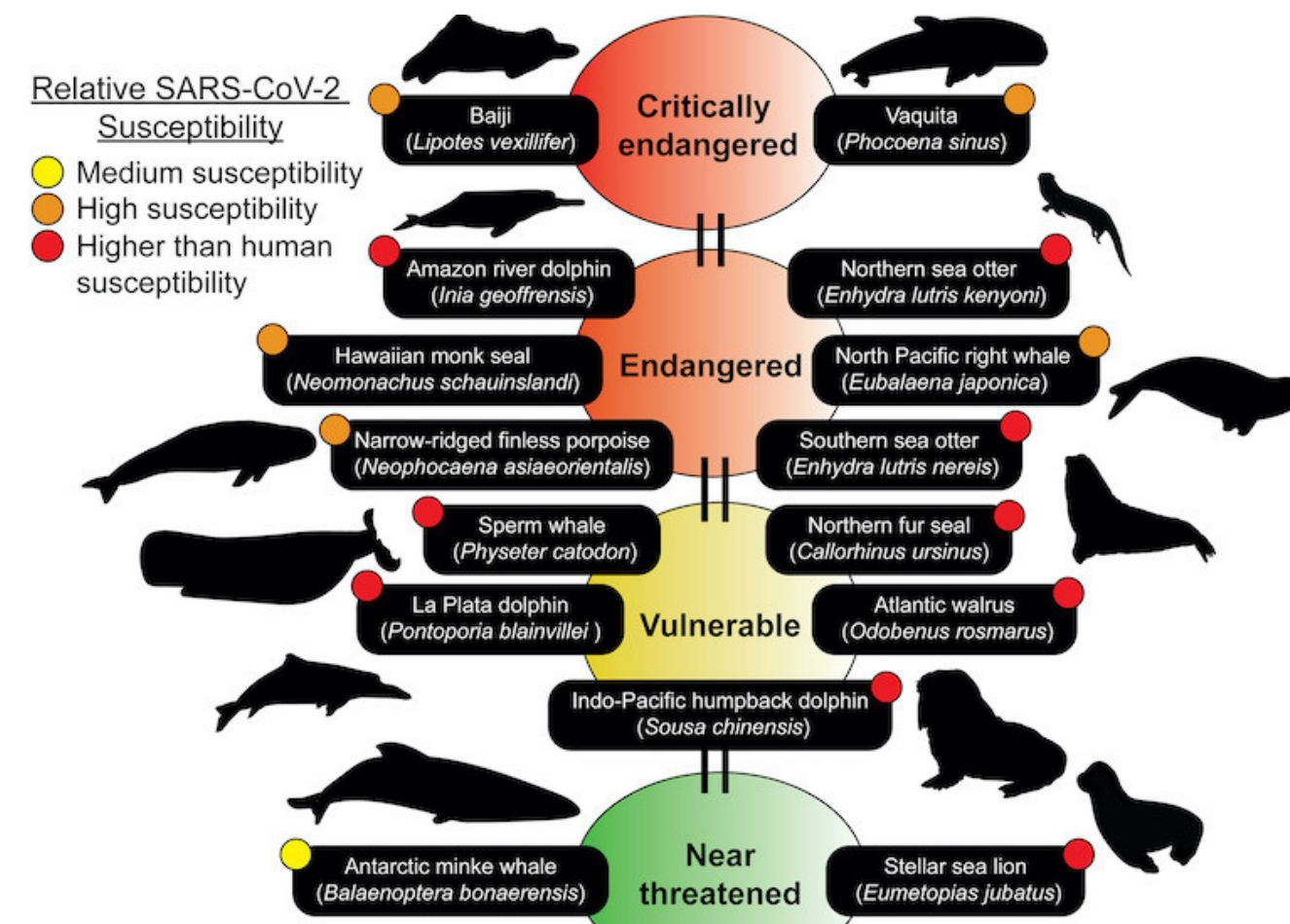
In most cases it appears to be simple: create an environmentally cleaner process. Unfortunately whilst this is a simple answer, it's also time-consuming, expensive and not guaranteed to work. It then falls to challenging the local population to do their part first to mitigate the damage before further commitment can be made to larger changes (Shreedhar & Mourato, 2020).

This also provides researchers with more time to provide qualitative data that represents the true scale of the problem.

However it is then up to leaders whether they take this information into consideration, or what value they feel that information has compared to data received from economic statistics, as well as social demand for action (Borzée, et al., 2020).



Studies have found that marine mammals are particularly susceptible to the virus that causes COVID-19, of which the RNA can be transferred through wastewater. This presents a new challenge on how wastewater is managed on a global scale if we are to protect critically endangered species (Alberts, 2020)



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It's not all quite as bad as it sounds though; numerous policies and changes have already been pushed through that are instigating more focus on the natural world than humans have ever done before.

- As we've seen, China has upgraded pangolins to first class protected status, making their illegal trade more difficult with much higher risks. This also led them to lay the groundwork for making the use of wildlife as food illegal (Roe, et al., 2020).
- Operation Thunder 2020 was launched a global initiative to crackdown in wildlife smuggling (National Geographic, 2020).
- Both Scottish and Welsh governments have urged the public to wear reusable masks in place of single-use to protect wildlife from 'covid litter' and reduce waste overall (National Geographic, 2020).
- Nottinghamshire Wildlife Trust has pitched the idea of using empty shopping areas to create green spaces and city centre meadows, using Broadmarsh as an example (Weston, 2020).
- US President-elect Biden announces a COVID-19 task force that will focus on science and environmental remediation
- Not related to governance, but on a global scale wildlife has slowly started to encroach on traditionally busy human areas, showing how overpopulation has affected environments and habitats



On a global scale, what can be done to ensure that governance of wildlife is managed in a way that is sustainable for both animals and humans? Whilst closing wildlife markets is underway (Melchor, 2020), the main reasons these exist is to provide sources of protein for the poor in rural areas; reducing the consumer demand by making affordable food available is key to the change becoming permanent (Aguirre, et al., 2020).

The food that is available from regular livestock needs to have more regulations to ensure acceptable living conditions; viruses have been shown to spread when animals are confined to a small area in large numbers, and so creating policies where there is either a minimum size area or a maximum number of livestock would reduce the ease of spread.

The WWF recommends that policy makers at all levels work closely with scientific researchers to ensure that appropriate steps are taken to minimise damage to the environment and create a sustainable relationship with local wildlife. This would include reducing land use change and rewarding gentler farming methods (WWF, 2020).

Monitoring of strong disinfectant use in the battle against COVID-19 needs to occur to ensure that overuse doesn't damage waterways (Nabi, et al., 2020).

Where wildlife has encroached into urban areas, study would need to take place to determine how to adequately share spaces with wildlife once human activity starts to increase again (Rutz, et al., 2020).



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With the increased requirement for PPE, either reusable options will need to be more readily available or they will need to be made from a recyclable material to reduce single-use plastic figures. Currently both Welsh and Scottish governments attempt to counteract this issue by recommending the general public use reusable face coverings where possible in order to protect wildlife and the environment (National Geographic, 2020). This also then frees up standard PPE to be used by key workers that are unable to use alternatives.

At a local level, education needs to occur to change certain cultural traditions that regularly use wildlife in outdated practices. Once these beliefs and behaviours are altered, the demand for illegal trade is reduced (Manentia, et al., 2020).

On a global platform, international agreements on waste management would need to be agreed to account for the increase in single-use plastics. This, along with more regulation on the culling and disposal of wildlife are two top priorities to ensure that work that has already been done to preserve wildlife is not diminished.



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