

HOW DO WE CHOOSE

A



WHAT TO SAVE?

B



In the face of a biodiversity crisis, and in a world with limited resources, where do we channel our conservation efforts?



Rebecca Nesbit explores the complicated landscape of conservation priorities.



How many of us have rolled our eyes at the outpouring of love for honeybees? No doubt many of you have exclaimed 'honeybees are just livestock!' or despaired that the wasps and nematodes go unnoticed. The western honeybee is one of conservation's most divisive species – you may see them as a priority or a scourge depending on your perspective. There are strong arguments on both sides. They are important pollinators, particularly of crops, yet are common and widespread. In some situations they even bring problems, including spreading disease to wild bees.

If a poster child of conservation divides opinion in this way, it's clear we face a challenge. How do we set our conservation priorities? And who should be part of that decision? We need elements of science and environmental philosophy to help answer the first question, and they don't lead to a simple solution. The second question is easier to answer: everyone. As ecologists, we have a role to play in informing the conversation, while also needing the humility to listen.

My book *Tickets for the Ark* explores conservation debates around the world, and challenges some of the ways we currently make our decisions. Here are just a few of the dilemmas I encountered.

PANDAS AND PARASITES

It's clear that conservation is heavily biased towards species we find appealing. Support is relatively easy to find for pandas, puffins and tigers (in the west at least – for anyone living in proximity to large predators, the situation can look very different). Other species, meanwhile, are neglected or even persecuted. Plants and fungi receive much less attention, and few invertebrates share the honeybee's popularity.

But if we move on from protecting favourites, where do we go? Do we just expand our interests to include species unknown to wider society yet loved by some ecologists? Many of us could put in a pitch for our chosen shrimps, flies or parasites, yet conservation priorities would still be made on the whims of a few privileged people.

We could instead protect as many species as possible, perhaps with the aim of minimising the number of extinctions. This would be a U-turn from our current priorities – we would need to focus on species that are easiest to save, leaving no resources for many mammals and birds.

Our lack of knowledge is a major barrier to prioritising the species that are easiest to save, and it seems unlikely that we'd be willing to forgo all our favourites. Thankfully, philosophical attempts to bestow intrinsic value on species are fraught with difficulties, as I explore in *Tickets for the Ark*, so there is no intrinsic reason why we should focus on minimising extinctions. We're therefore free to look for more realistic strategies. Other solutions include focussing on habitats or ecological processes, although these alternatives come with their own challenges.

PROTECTED AREAS

Protected areas are a pillar of conservation, and can be effective at protecting biodiversity and ecosystem processes. However, when it comes to setting priorities, protecting land has similar conundrums to protecting species. There are choices to be made about which habitats to protect on land and at sea, and resources will always be limited. We can make choices scientifically, asking questions such as which areas will protect most species or store most carbon. Science isn't enough though – it can give answers to these questions, but it can't tell us which question to ask. Our values determine what we want to achieve.

Every protected area will have winners and losers, both among people and the rest of nature. Some species thrive in the human landscape created when existing habitats are cleared, so don't benefit from protected areas. Likewise, some humans will lose out due to protections. When considering the people who suffer any consequences, we would be wise to remember that western conservation has deep roots in colonialism. This attitude hasn't died even in countries where settlers have left. Perhaps the most obvious example is that people are

still removed from their land in the name of conservation, and many more are forbidden from using resources they need for survival.

'Green land grabs' are now being challenged, and protected areas are being put in context. A 2021 review concluded that, compared to non-protected areas, deforestation is reduced in areas traditionally owned, managed, used or occupied by Indigenous people (Sze et al.). Datasets from 2010–2018 indicated that Indigenous lands avoided deforestation at similar levels to protected areas, except in Africa where Indigenous lands performed better than protected areas. This is a sobering thought for a conservation movement which has often assumed that western scientists know best.

There's now widespread acceptance that conservation must recognise the contributions of Indigenous people and uphold their rights. However, we are still a long way from ensuring that local communities and Indigenous people are true partners in conservation. That would



require us not just to be open about how we protect nature, but also what we should prioritise. We would need to listen to other worldviews about what is important to save, even if they conflict with our own.

NATURE AND PEOPLE

A central tension of conservation is whether we are protecting nature *for* humans or *from* humans. Early examples of area-based conservation show obvious elements of both: game reserves were protected from local people for the benefit of the rich. Still today, protected areas safeguard nature from the impact of certain people, while others benefit. For many conservationists, a major motivation for creating protected areas is the benefits they bring to people. The IUCN, for example, states that protected areas are "a mainstay of biodiversity conservation, while also contributing to people's livelihoods, particularly at the local level."

The reality is more complex though, and people clearly differ in the extent to which they are driven to protect nature for people. There's also a difference in who we end up benefitting. Where protected areas are open to tourism, benefits often go to the wealthy few who can afford to access them. Likewise, benefits may be felt globally through ecosystem services such as carbon storage. This is a powerful motivator for conservation, but doesn't always bring benefits for local people. There may be trade-offs between carbon storage and local food production, for example, so this adds extra complexity to setting conservation priorities.

HISTORIC BASELINES

Even if nature conservation aims to benefit people, it's clear we need to reduce humanity's impact on the natural world. However, this can sometimes get mixed up with an ideological desire to separate humans from the rest of nature. Philosophically, that's hard to justify: humans evolved as part of nature, so at what point did our impact on nature become somehow 'unnatural'?

Still, conservation priorities are often influenced by the ideology of 'pristine' nature untouched by humans. Not only are people removed from protected areas, but we sometimes aspire to return nature to a past state where humans had less influence. If humans aren't separate from nature, how can that historic baseline be morally relevant? It's also impossible to

create a version of nature that is unaffected by humanity. *Homo sapiens* have been altering landscapes for 200,000 years, and climatic changes mean we can't know what nature would look like if humans had never evolved.

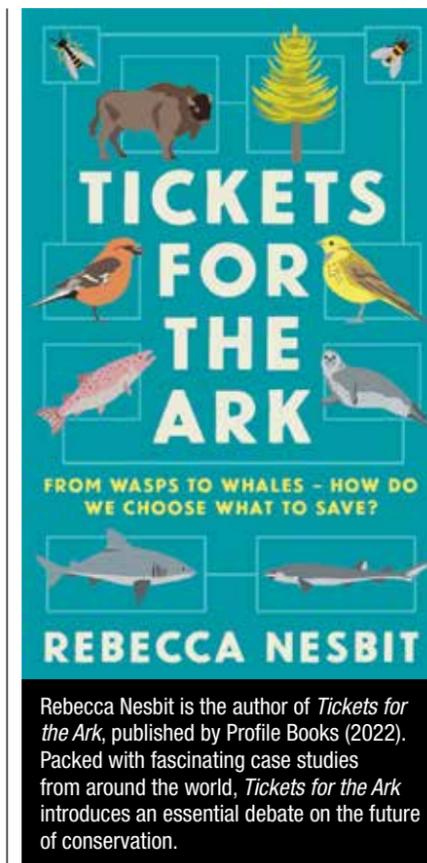
There are reasons to reverse some changes humans have made to nature, but better conservation choices will come from clarifying these reasons rather than clinging to an arbitrary baseline. Debates over introduced species are a pertinent example: removing species because of an ideological idea that they don't 'belong' will waste resources. There are practical challenges to identifying which species will cause damage, and indeed defining what damage means, but focussing on impact not ideology leads us to wiser strategies.

ANIMAL WELFARE

With the increased recognition of the relationship between nature conservation and human wellbeing, we must remember that we aren't the only animals whose wellbeing is at stake. Conservation currently has an awkward relationship with animal welfare, and welfare arguments tend to be used to justify existing priorities rather than as a guide to what our goals might be. If a rhino is killed by poachers or a bird of prey poisoned by game keepers, this is a tragic act of cruelty. On the other hand, if rats and mice are culled to protect native species, this isn't something to get sentimental about. However, an animal's capacity to suffer isn't related to its rarity or how attractive it is to humans.

Given the high level of societal concern for animal welfare, along with the increasing scientific understanding of animals' capacity to experience pleasure and pain, this is an issue that conservation can't ignore. Conservationists may legitimately argue that harming animals is a necessary step towards an important goal, but these debates are wide open. Populations and species aren't automatically more important than individuals.

It won't be easy to incorporate animal welfare into the complex process of setting conservation priorities, but our current inconsistencies highlight the need to open a discussion. As well as debating details of how to meet conservation goals, it's essential to explore the values and justifications behind our choices. We don't just need to question what we want to save, but also consider why. ✿



Rebecca Nesbit is the author of *Tickets for the Ark*, published by Profile Books (2022). Packed with fascinating case studies from around the world, *Tickets for the Ark* introduces an essential debate on the future of conservation.



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