

The post-COVID landscape: A chance to end the use of threatened wild animals in traditional Chinese medicine?

Triggered by the emergence of COVID-19, public and political attention to the health and biodiversity risks of commercial trade in wild animals have led to substantive policy changes in China relating to the breeding and trade of wild animals as food. However, to date, new restrictions do not impact upon the use of wild animals in traditional Chinese medicine (TCM), despite the fact that demand for species currently used legally in TCM, such as pangolins, leopards, saiga and bears, continues to drive illegal trade and threaten wild populations. The cultural, political and institutional contexts in which TCM trade and consumption occur pose complex challenges to reducing this demand. Nonetheless, discussion of wildlife trade policy has seen a wide range of stakeholders in China, including lawmakers, academics, NGOs and medical experts, call for further policy amendments to end the use of threatened wild animal species in TCM. Commentators and campaigners globally should recognize this heterogeneity of opinion and work to support these efforts, which are crucial for establishing conditions in which demand for threatened species can be reduced.

The emergence of COVID-19 and its suggested links to trade in wild animals triggered waves of debate in China and worldwide over the biodiversity and public health risks of commercial wildlife trade and appropriate policy responses to mitigate these risks. Latterly, these debates have formed part of discussions of green recovery and stimulus packages as an opportunity to realize a less destructive and exploitative relationship with the natural world. There is growing recognition that human activities including habitat destruction, industrial livestock farming and commercial trade in wild animals are creating conditions that increase the likelihood of zoonotic disease emergence.

Following widespread media coverage of reports linking the emergence of SARS CoV-2 in late 2019 to a market in Wuhan where wild animals were sold, policy responses in China were swift. An initial temporary (albeit ill-defined) ban on trade in wild animals “in any form” in January 2020 (State Administration for Market Regulation, Ministry of Agriculture and Rural Affairs and National Forestry and Grasslands Administration, 2020) was

followed in February by a prohibition on commercial breeding and trade in almost all species of terrestrial wild animal for consumption as food (National People’s Congress of the People’s Republic of China, 2020). This represents possibly the most significant policy change relating to wildlife trade adopted by any government since COVID-19, especially given that commercial use of wild animal species as food in China was estimated in 2016 to be worth US\$18 billion, employing 6.3 million people (Wang *et al.*, 2020).

Also in February 2020, the Chinese Government announced that the Wildlife Protection Law, the country’s most important piece of legislation on conservation and trade of wild animals, was to be revised that year in order to “intensify efforts to crack down on and punish wanton and excessive hunting and eating of wild animals” (Ministry of Natural Resources of the People’s Republic of China, 2020).

However, the prohibitions adopted in February covered only use of terrestrial wild animals for consumption as food. Aquatic species were not covered under the ban, leaving space for continued trade in threatened species including various

Aron White

About the author

Aron is a Wildlife Campaigner and China Specialist at the Environmental Investigation Agency. He holds a degree in Chinese Studies from the University of Cambridge, and has lived and studied in Beijing and Taipei.

Citation

White A (2021) The post-COVID landscape: A chance to end the use of threatened wild animals in traditional Chinese medicine? *The Ecological Citizen* 4: 153–8.

Keywords

Biodiversity; conservation; traditional Chinese medicine; wildlife trade

“While the majority of medicinal ingredients used in TCM are derived from plants, wild animal products are still listed in the Chinese state pharmacopoeia.”

turtles and amphibian species. Nor did the ban cover breeding and trade for non-food purposes, such as fur, pets, ornamental items or traditional Chinese medicine (TCM). A draft revision of the Wildlife Protection Law, published in October 2020 for public comment, consolidates the prohibition on food consumption and strengthens elements relating to law enforcement and sentencing, but continues to permit commercial use of even threatened and protected wild animal species for non-food purposes, including TCM (Environmental Investigation Agency, 2020c).

Ongoing legal trade in threatened wild animal species for use in TCM

While the majority of medicinal ingredients used in TCM are derived from plants, wild animal products are still listed in the Chinese state pharmacopoeia (Chinese Pharmacopoeia Commission, 2020) and are used as ingredients in processed medicines sold in pharmacies and TCM hospitals. Species in legal trade include the critically endangered saiga antelope (*Saiga tatarica*) and Chinese pangolin (*Manis pentadactyla*), as well as the leopard (*Panthera pardus*) and Asiatic black bear (*Ursus thibetanus*), both assessed as vulnerable by the International Union for Conservation of Nature (IUCN), and musk deer (*Moschus* spp.), of which various species are assessed as endangered or vulnerable.

The persistence of such legal trade is of concern from both biodiversity and animal welfare perspectives. With the exception of some populations of musk deer, international trade in wild-sourced specimens of the aforementioned species is prohibited by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which China is a party, in recognition of the threat commercial trade poses to the species' survival. In the case of leopard bone, saiga horn and pangolin scales, the Chinese Government claims that the products in legal TCM trade derive from verified stockpiles, but a lack of transparency around the origins and management of

these stockpiles has led to serious concerns that legal trade mechanisms could be enabling the laundering of poached and trafficked specimens, while serving to legitimize medicinal use of the products in general (Environmental Investigation Agency *et al.*, 2019; Environmental Investigation Agency, 2020a; 2020b). Meanwhile, poaching and trafficking of these species to China for TCM use continues; for example, in December 2020, seventeen individuals were convicted in Hunan Province following the seizure of products including 940 saiga horns, pangolin scales, musk and bear bile (China News Hunan, 2020).

In the case of bear bile and musk, the products in legal use in China are supposed to derive from captive individuals. The legality of medicinal use of tiger bone is ambiguous, but a government notification from 2018 suggests that farmed tiger bone may be used in TCM in certain circumstances (State Council, 2018). Many commentators have expressed concern that legal trade from captive or farmed wild animals frequently does not relieve pressure on wild populations of the species (*e.g.* Tensen, 2016), in some cases due to consumer preference for the wild-sourced product, which may be perceived as more effective or authentic. This is seemingly borne out by the worsening conservation statuses of species which are legally farmed in China and continuing trafficking of their parts to consumer markets in China. Moreover, farming bears for their bile has been widely condemned within and outside China given the dire welfare implications of live bile extraction and husbandry conditions (*e.g.* Maas, 2000).

Possible reasons for differing approaches to medicinal and non-medicinal use

The contrast between the ambition and precautionary approach demonstrated by the Chinese Government's near-comprehensive ban on trade in terrestrial wild animals for consumption as food versus a continuing intransigence regarding use of even highly threatened species in TCM raises questions about the priorities and influences at work

in decision-making circles. At the same time, it is important to recognize the broad range of stakeholders in China who have publicly called for an end to commercial exploitation of threatened wild animals for medicinal use.

Fundamental differences between different forms of consumption are a likely reason behind divergent approaches. Beliefs in the medical efficacy of TCM treatments are long-standing and culturally ingrained (Cheung *et al.*, 2020). However, the fact that ivory carving, a practice which had previously received government protection as a form of intangible cultural heritage (Gao and Clark, 2014), was banned in China in 2017 demonstrates that decision-makers will not invariably prioritize cultural heritage over ecological and reputational concerns. Nonetheless, proposals to amend medical treatments in which belief in efficacy is strongly held are arguably fundamentally different to those impacting on only luxury or ornamental use.

TCM as a whole receives patronage from the highest levels of government. President Xi Jinping has on multiple occasions emphasized TCM as an important element of China's healthcare system and international influence (Gan and Xiong, 2020). International development of TCM as a cultural export is also one of the objectives of Xi's flagship Belt and Road Initiative (Hinsley *et al.*, 2020).

Against this backdrop, criticism of TCM has arguably been politicized by certain stakeholders in China. This is perhaps best exemplified by amendments to Beijing municipal regulations on TCM proposed in June 2020 (since dropped following widespread criticism) which could have criminalized perceived 'slander' of TCM (Sun and Ju, 2020). In 2016, Li Fei, a member of China's National People's Congress Standing Committee, China's highest law-making body, claimed that "some of the foreign organizations working in wildlife protection are big pharmaceuticals, and use wildlife protection to suppress the development of Chinese medicine; political and commercial interests are behind them" (Lei, 2016). Evidently,

debate over TCM policy can have political implications.

Institutional culture within key government agencies also appears to be a significant factor in development of policy relating to medicinal use of wild animals. The National Forestry and Grasslands Administration (NFGA) is the key government agency tasked with managing conservation of wild animals in China. The NFGA and its provincial branches are also responsible for permitting of trade in protected species. Support for commercial exploitation of wild animals, particularly for TCM, is long-standing and pervasive within the NFGA. For example, in a 2018 statement on "the healthy development of the rare animal medical industry," the NFGA pledged to ensure supply of wild animal ingredients to the TCM industry, including through captive breeding (National Forestry and Grasslands Administration, 2018). Subsequently, a 2020 guidance document issued by the NFGA following the February ban on breeding and trade for food consumption suggested that if farmers had been breeding a species for food which also has some medicinal utility, they should pivot their production to serve the medicinal industry (National Forestry and Grasslands Administration, 2020).

Recent calls from Chinese stakeholders to end use of threatened wild animals in TCM

While the lack of significant policy change relating to commercial use of threatened wild animal species in TCM suggests these likely influencing factors remain significant for now, voices calling publicly for change have been heard from multiple groups within Chinese officialdom and civil society.

Following the announcement in February 2020 that the Wildlife Protection Law was to be revised, various members of China's National People's Congress publicly recommended that changes be made to further restrict commercial use of wildlife. Lin Tengjiao highlighted how farming has not benefitted wild populations of bears or musk deer and that the medicinal industry

“It is important to recognize the broad range of stakeholders in China who have publicly called for an end to commercial exploitation of threatened wild animals for medicinal use.”

increases opportunities for the spread of animal viruses to humans (Zhang, 2020). Liu Hong recommended an end to all production and trade of wild animal products, and all breeding of wild animals for purposes other than research (Liaoning Daily, 2020), while Zhao Wanping was reported as having called for prohibition of captive breeding of wild animals (Zhu, 2020). Meanwhile, other delegates specifically called for medicinal use of wild animals to continue.

Many Chinese academics have publicly participated in debates around China's wildlife trade policy. In March 2020, five scholars from the Beijing Normal University School of Government wrote in a letter to the journal *Science* that "a total ban on the consumption of terrestrial wildlife alone is not enough to effectively protect public health from wildlife-associated diseases" and that "the traditional medicine industry would continue to threaten wildlife." Instead they called for financial support to be made available to help the wildlife farming industry "transition away from the production of traditional Chinese medicine" (Wang *et al.*, 2020). Commenting on suggestions developed with academic and NGO colleagues on the revised Wildlife Protection Law, Dr Lingyun Xiao of Xi'an Jiaotong-Liverpool University remarked, "even animals that have special state protection can be hunted in the wild if it's for national medicinal or medical production purposes. This is clearly outdated and needs to be deleted" (Pieterse, 2020).

Several Chinese NGOs have specifically called for greater restrictions on medicinal use of wild animals. For example, in November 2020 the SEE Foundation recommended that exemptions allowing for medicinal use of wild animals should be removed, noting controversy surrounding use of pangolins, tiger bone and bear bile; instead they recommend establishment of a 'white list' for species which can be used for medicinal purposes, developed with conservationists and experts (SEE Foundation, 2020). In an open letter to medical authorities in April 2020, the Capital Animal Welfare Association (CAWA)

commented on use of wild animal species in traditional medicine, noting concerns that official sanctioning of products such as bear bile legitimizes use of the product and impedes efforts to tackle illegal trade. CAWA stated that authorities should "choose to use substitutes" as "the only correct way to help TCM move with the times" (Capital Animal Welfare Association, 2020). Prior to this, several Chinese NGOs co-sponsored a motion to the IUCN World Conservation Congress which called upon members to support an end to use of threatened species in TCM and assist in development of sustainable alternatives (International Union for Conservation of Nature, 2019), although the language ultimately adopted by the Congress was considerably weaker.

Numerous TCM practitioners and academics have publicly stated that various wild animal products are no longer necessary in TCM. This is not new – for example, in 2010 the World Federation of Chinese Medicine Societies urged its members not to use endangered wildlife and stated that the industry should look for substitutes to tiger products (WWF, 2010). In 2020, Professor Wang Qi of the Beijing University of Chinese Medicine wrote that "the medicinal effects of wild animals are exaggerated" and that "relevant departments may want to consider amending [...] relevant laws to clearly prohibit the medicinal use of species under special state protection in medicine" (Wang, 2020). Scholars from the University of Hong Kong School of Chinese Medicine have proposed herbal alternatives to products such as bear bile (Feng *et al.*, 2009) and pangolin scales (Zhang, 2018), while former Director of the School, Professor Lao Lixing, has argued that using endangered animals is contrary to the fundamental principles of TCM (Standaert, 2020).

The way forward

Evidently, support for use of threatened species in TCM is far from universal among Chinese officialdom, academia, civil society or within the TCM community. It is important that commentators and campaigners recognize and reflect this

“Several Chinese NGOs have specifically called for greater restrictions on medicinal use of wild animals.”

heterogeneity of opinion, both to avoid homogenization of these groups and related potential for contributing to xenophobic and unjust narratives, and to encourage fruitful collaboration between those in different sectors with shared objectives. Efforts to end the use of threatened species in TCM are more likely to be effective if they respect rather than denigrate the tradition of TCM as a whole, and where possible work with experts and practitioners to develop and promote culturally acceptable alternatives to wild animal products (Cheung *et al.*, 2020).

If changes to policy and TCM practice relating to use of threatened wild animal species are to be achieved, these will be in large part due to the efforts of advocates in China. Those outside the country should carefully consider the challenges of such work and avoid unnecessarily politicizing discourse. Nonetheless, given the serious lack of transparency around current trade mechanisms and the conspicuous lack of progress to date, it is crucial that researchers within and outside the country play close and critical attention to policy developments and implementation, and continue to publish research on the reality of commercial exploitation of threatened species in TCM.

The emergence of COVID-19 and subsequent discourse has focused an unprecedented degree of public and political attention on the risks of the commercial wildlife trade, both in China and globally. Considerable appetite exists among the Chinese public for further changes: research conducted in February 2020 into public attitudes to trade and consumption of wildlife found that over 90% of respondents would support more stringent restrictions (Shi *et al.*, 2020). Given that, at the time of writing, revisions to China's Wildlife Protection Law are yet to be finalized, there remains a rapidly narrowing window of opportunity for further changes that could be instrumental in ending use of threatened wild animal species in TCM. Researchers and commentators in China and worldwide should continue to urge lawmakers to

extend the commendable precautionary approach applied to date to trade in wild animals for food consumption to other uses including TCM, particularly given the serious biodiversity risks inherent in continuing with the status quo. ■

References

- Capital Animal Welfare Association (2020) 致国家卫生健康委员会的一封信 [An open letter to the National Health Commission]. Available at <https://mp.weixin.qq.com/s/JKGxdrnqYaO3U25pOwz2yg> (accessed December 2020).
- Cheung H, Doughty H, Hinsley A *et al.* (2020). Understanding traditional Chinese medicine to strengthen conservation outcomes. *People and Nature* doi: 10.1002/pan3.10166.
- China News Hunan (2020) 快递单撕开野生动物“地下黑市”涉案2600余万元 [Courier slips uncover “underground black market” for wildlife, worth more than 26 million yuan]. Available at <https://is.gd/YQSUHw> (accessed December 2020).
- Chinese Pharmacopoeia Commission (2020) 中华人民共和国药典, 2020年版一部 [Pharmacopoeia of the People's Republic of China, 2020 edition, part 1]. Zhongguo yiyao Keji Chusheban, Beijing, China, 2020.
- Environmental Investigation Agency (2020a) *Bitter Pill to Swallow: China's flagrant trade in leopard bone products*. Available at <https://is.gd/oGABiz> (accessed December 2020).
- Environmental Investigation Agency (2020b) *Smoke and Mirrors: China's complicity in the global illegal pangolin trade*. Available at <https://is.gd/j5bRt2> (accessed December 2020).
- Environmental Investigation Agency (2020c) *EIA recommendations regarding 2020 revision draft of the Wildlife Protection Law*. Available at <https://is.gd/KEyClO> (accessed December 2020).
- Environmental Investigation Agency, Center for Biological Diversity and Humane Society International (2019) *Transfer Saiga Antelope to Appendix I*. Available at <https://is.gd/LoAjYk> (accessed December 2020).
- Feng Y, Siu K, Wang N *et al.* (2009) Bear bile: Dilemma of traditional medicinal use and animal protection. *Journal of Ethnobiology and Ethnomedicine* 5: 2.
- Gan N and Xiong Y (2020) Beijing is promoting traditional medicine as a 'Chinese solution' to coronavirus. Not everyone is on board. CNN, 16 March. Available at <https://is.gd/REMXfj> (accessed December 2020).
- Gao Y and Clark S (2014) Elephant ivory trade in China: Trends and drivers. *Biological Conservation* 180: 23–30.
- Hinsley A, Milner-Gulland EJ, Cooney R *et al.* (2020) Building sustainability into the Belt and Road Initiative's traditional Chinese medicine trade. *Natural Sustainability* 3: 96–100.

“Efforts to end the use of threatened species in TCM are more likely to be effective if they respect rather than denigrate the tradition of TCM as a whole.”

“If changes to policy and TCM practice relating to use of threatened wild animal species are to be achieved, these will be in large part due to the efforts of advocates in China.”

- International Union for Conservation of Nature (2019) *Motion 108 – Adapting traditional medicine to fulfill the vision of ecocivilisation* (old version). Available at <https://is.gd/MaUPMT> (accessed December 2020).
- Lei C (2016) 死虎骨头能否利用? 全国人大常委会委员激辩 [Can the bones of dead tigers be utilized? Members of the National People's Congress Standing Committee debate]. *Shangguan News*, 27 April. Available at <https://is.gd/71QVVd> (accessed December 2020).
- Liaoning Daily (2020) 全国人大代表刘宏: 完善立法从源头防范公共卫生安全风险 [National People's Congress delegate Liu Hong: improve legislation to guard against public health risks at the source]. *Liaoning Daily*, 25 May. Available at <https://is.gd/YN7Ua7> (accessed December 2020).
- Maas B (2000) *The veterinary, behavioural and welfare implications of bear farming in Asia*. World Society for Protection of Animals, London, UK. Available at <https://is.gd/xaig7m> (accessed January 2021).
- Ministry of Natural Resources of the People's Republic of China (2020) *National People's Congress Standing Committee Legal Affairs Commission begins revision of Wildlife Protection Law*.
- National Forestry and Grasslands Administration (2018) “关于大力支持名贵动物药产业健康发展的提案”复文 (2018年第2015号) [Response to proposal regarding vigorously supporting the healthy development of the famous and valuable animal medicinal industry, Notification No. 2,015, 2018].
- National Forestry and Grasslands Administration (2020) 国家林业和草原局关于稳妥做好禁食野生动物后续工作的通知 [National Forestry and Grassland Administration Notification regarding reliable and proper follow-up work on the prohibition on eating wild animals]. Available at <https://is.gd/esQcqn> (accessed December 2020).
- National People's Congress of the People's Republic of China (2020) *Decisions of the Standing Committee of the National People's Congress relating to a total prohibition on illegal wildlife trade, eliminating the bad habit of excessive eating of wildlife, and effectively safeguarding the lives and health of the public*. Available at <https://is.gd/5TDSMA> (accessed December 2020).
- Pieterse P (2020) *Wildlife group submits suggestions for law revision*. Available at <https://is.gd/05XvKp> (accessed December 2020).
- SEE Foundation (2020) SEE基金会就《野生动物保护法》(修订草案)的建议 [SEE Foundation recommendations regarding the Wildlife Protection Law (draft revision)]. Available at https://mp.weixin.qq.com/s/4_smpvK2Z_ebejw2c5KZ1A (accessed December 2020).
- Shi X, Zhang X, Xiao L *et al.* (2020) Public perception of wildlife consumption and trade during the COVID-19 outbreak. *Biodiversity Science* **28**: 630–43.
- Standaert M (2020) 'This makes Chinese medicine look bad': TCM supporters condemn illegal wildlife trade. *The Guardian*, 26 May. Available at <https://is.gd/nXchZT> (accessed December 2020).
- State Administration for Market Regulation, Ministry of Agriculture and Rural Affairs and National Forestry and Grasslands Administration (2020) *Notification regarding prohibition of trade in wild animals*.
- State Council (2018) State Council Notification regarding strict control of management and utilisation of rhinoceroses, tigers and the products thereof. Available at <https://is.gd/hgSloj> (accessed December 2020).
- Sun L and Ju Y (2020) Beijing drops plans to criminalize criticism of Chinese medicine. *Caixin*, 2 December. Available at <https://is.gd/mmKgIG> (accessed December 2020).
- Tensen L (2016) Under what circumstances can wildlife farming benefit species conservation? *Global Ecology and Conservation* **6**: 286–98.
- Wang H, Shao J, Luo X *et al.* (2020) Wildlife consumption ban is insufficient. *Science* **367**: 1435.
- Wang Q (2020) 还有多少“穿山甲”需从药典除名 [How many more “pangolins” need to be removed from the pharmacopoeia?]. Available at <https://is.gd/d8MrGF> (accessed December 2020).
- WWF (2010) Chinese medicine societies reject tiger bones ahead of CITES. Available at <https://is.gd/WinxtZ> (accessed December 2020).
- Zhang K (2018) Consider alternatives to pangolin scales, traditional Chinese medicine professors urge at conservation conference in Hong Kong. *South China Morning Post*, 6 September. Available at <https://is.gd/2IGXfl> (accessed December 2020).
- Zhang K (2020) 加强药用野生动物养殖业监管 代表委员纷纷支招 [Delegates successively make suggestions for strengthening supervision and management of the medicinal wild animal breeding industry]. *Yicai*, 21 May. Available at <https://is.gd/RdTvU2> (accessed December 2020).
- Zhu N (2020) 用最严厉法律守护人民群众健康安全 [Use the strictest laws to protect public health and safety]. *Legal Daily*, 10 March. Available at <https://is.gd/6cs2FX> (accessed December 2020).

Sign up for content alerts at: www.ecologicalcitizen.net/#signup

Sounding out other species

All animals, including humans, employ methods of communication to convey meaningful and adaptively-significant information. These range from movement, eye contact, and scent-release to light displays and, of course, vocalizations. The human use of complex language is not the only resource available for animals to let others know what they need, want or plan. Yet we have no legally recognized mechanism to make use of these communications in order to represent other species in conflicts with us or in situations we've created that are critical to their lives. It is time to consider new ways of politically listening to animals, not only as a means of ensuring some measure of procedural justice but to refute the convenient claim that non-human animals have no voice.

What I hear first is heavy breathing like someone has just outrun a bear. I follow the sound down to my feet. There, in the grasses, is a large rabbit, struggling for air. It doesn't have to tell me what's wrong. I know by the way its eyes are crusted over like newly covered graves. It's got what we call 'myxy' – a nasty and fatal disease caused by the poxvirus, *Myxoma*. It produces swellings and lesions on the membranous parts of the animal, breathing difficulties and severe suppression of the immune system. Most rabbits die unpleasantly within two weeks of contracting the virus.

A few days later, after I'd been in the kitchen listening to the latest news on COVID-19, the disease caused by another pathogen, SARS-CoV-2 – but this one attacking the human world – I went outside to find that old rabbit, utterly blind now, grazing near its burrow. Our home is in the middle of a 10,000-acre managed forest in the north of England. We have no visible human neighbours, and the nearest public road is nearly three miles away. Who we see most often is this rabbit, or one of the many others that live around us. And they're not our only non-human neighbours. There are roe deer that graze our back field, who've left the temporary gift of one of their newborn for two years running now. There's a barn owl roosting nearby, who

hunts on our land like daylight's ghost. There are the mice and voles that make holes in our front lawn, and peer up at us as like tiny earthmen of Narnia, dwellers of the Underland (Lewis, 1953).

I've said 'our' a lot in these sentences but this land is theirs too. What we own officially in the human world forms the mental and physical territory of thousands of other beings in our midst. We live in a multispecies community. Our small human family is heavily outnumbered. There are nightjars. Tawnies and woodcocks. Goshawks nest close by. And that is to say nothing of the inconspicuous, whose lives are made secret by habit or habitat. The beetles that leave their larva in the warm layers of earth. The efts that shelter in our kids' sandpit. The earwigs and millipedes that seem gifted with the ability to walk through walls, turning up in the dark, neglected corners of my study. The moths that hibernate in the warm shadowed vents of the barn, hanging together like old clothes.

So, we knew this old rabbit a little. Normally, he would flip into the air like a sprung trap when we came outside, then disappear into the hole beneath the damson tree. On the day I found him still alive and grazing, he made no effort to run away, just moved blindly forward, pulled by the need for food. I watched him and spoke

Melanie Challenger

About the author

Melanie works as a researcher on environmental philosophy, and the history of humanity and the natural world. She is the author of – amongst other works – *On Extinction: How we became estranged from nature* and *How to Be Animal: A history of what it means to be human*.

Citation

Challenger M (2021) Sounding out other species. *The Ecological Citizen* 4: 159–62.

Keywords

Ecological empathy

“While we shelter from a virus we’ve brought on ourselves through our intensive exploitation of other species, this rabbit died because we deliberately infected his kind with a devastating pathogen.”

a few futile words to him. Two days later, I found him dead under the salvia bush a few feet from his home. And what I felt was shame. While we shelter from a virus we’ve brought on ourselves through our intensive exploitation of other species, this rabbit died because we deliberately infected his kind with a devastating pathogen.

It was the French physician and bacteriologist, Paul-Felix Armand-Delille who brought myxomatosis to his country and, in doing so, collapsed the rabbit populations across much of Europe (Bartrip, 2009). A specialist in malaria, he’d been inspired by the successful control of rabbits in Australia through *Myxoma* and, in 1952, decided to experiment with releasing it on his own estate in France. The virus escaped within a matter of months and, by the year’s end, nearly half of the wild rabbits of France were dead. Unsurprisingly, it wasn’t just rabbit populations that were affected by his decision. Predators that mostly filled their bellies with rabbits also began to decline, and this included the iconic Iberian lynx (Platt, 2011). It had been a catastrophic and callous decision, yet it existed within an internally logical and permissive ethical landscape.

Most often, our relationship with other species turns on whether we consume them or meet them in an environment as rivals of some kind. We can think of it as the ‘eat or compete’ logic. Even today, many view rabbits simply as a pest or as a meal. It takes little effort to find someone who will help get rid of a rabbit ‘infestation’. As a result of this framing, humans give themselves free rein to gas an entire burrow system. Or shoot rabbits for recreation. Or bait live traps. We can anticipate that once gene-edited methods of control become possible, these will be added to the toolkit. And so, it’s almost impossible for our societies to make sense of what might be wrong in the release of myxy – or, indeed, what might sadden us in the associated disappearance of the Iberian lynxes – while we continue to act from this ‘eat or compete’ logic. Yet many of us find our moral sentiments pulled in favour of these other animals when we look from their point of view. For

much of modern history, such an internal move has been belittled as ‘emotionalism’ or ‘anthropomorphism’. But we urgently need a fresh means of squaring up to the kinds of moral puzzles we now face.

It is generally accepted by people around the world that our actions are driving large-scale impacts on the rest of life on Earth. Climate change, biodiversity losses, coral bleaching – these kinds of events are in the daily news cycle. They are a part of our global psyche. And so, as cultural geographer Franklin Ginn has written of the current extinction crisis, “learning to live less destructively and more ethically with nonhumans is clearly a pressing task” (Ginn, 2014: 532). There’s a growing movement of people of all nations who recognize that we can’t continue with what GENIE co-founder, Joe Gray, and colleagues call a “single-species democracy” (Gray *et al.*, 2020). But there remains a stubborn refusal to think about animals on their own terms. We continue to talk collectively about ‘animals’ as if a species of orb spider is of a piece with a gorilla. We talk about ‘nature’ as if our duties to this seemingly homogenous *other* can be dealt with in concert. In this way, we continue to act as if other animals are somehow without being. And, as they have no being, they have no ethical weight in the societies of our planet. Their lives are light with meaninglessness, while our human lives are freighted with meaning. *Their* being is morally diaphanous, morally silent, whereas *our* being is thick with value. Yet history reminds us we can be woefully misled by false frameworks.

There was once a time when other animals were a part of our systems of justice. In Europe, throughout the middle ages and until only a few centuries ago, other beings could be tried and convicted as the perpetrators of crimes. Their cries or growls were offered as admissions of guilt or pleas of innocence. Most commonly it was domesticated animals that were imprisoned or executed: horses, cows, sheep, dogs. But pigs were the repeat offenders. EP Evans’ large study on the trials found that one pig was hanged in the fourteenth century for eating a church

wafer (Evans, 1906). There's more than a little irony in the fact that while other animals were thought to be in service to us because they lacked souls, they could only be punished because, like us, they possessed bodies that could be tortured. In other words, a Judeo-Christian framing meant that, for a long while, animals could be moral *agents* but never moral *subjects*. Only an entrenched belief in a biological hierarchy set by a Christian God prevented us from listening to other species properly or seeing that our own harmful actions against other species might also be viewed as criminal.

As Europe shifted towards secularism, at least in matters of jurisprudence, a strange reversal took place that holds to this day. Animals lost their moral agency but, in turn, they began to emerge as moral subjects. However, the emphasis on minimum thresholds of welfare have only been as significant as the animals' experiences appeared to be. Or, more truthfully, as we have been willing to allow them to appear to be, given the overwhelming cultural and economic impulse to continue utilizing them. There is only so much recognition of the feelings, intentions or agency of other species that can be tolerated. And almost no recognition of the staggering and relevant differences between what different kinds of animals might need or want. The reason we're stuck with this minimum of moral subjecthood is because we've not been looking from the perspective of other animals' centres of experience.

It is nearly a decade now since the Cambridge Declaration on Consciousness (Low, 2012). The headline that went around the world stated that "animals are conscious and should be treated as such". Scripted and signed by leading neuroscientists Philip Low, Christoph Koch and the late Jaan Panksepp, and witnessed by Stephen Hawking, the declaration was unequivocal in its findings: "non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviours" (Low, 2012). This was a landmark statement. Other animals,

these scientists confirmed, experience and express, in measurable ways, worlds of awareness and intention that should matter to us (if, by logic, our own worlds of awareness and intention matter). But what has followed from it? Well, surprisingly little. But there are signs of changes afoot.

In recent years, philosophers and social scientists concerned with democratic process have focused on forms of 'political listening' that encourage us to pay attention to the voices of those that will be affected by our political, economic and legal decisions. Might something similar be possible with other animals? In recent years, Alasdair Cochrane (2018) and Alfonso Donoso (2017) have argued independently for new methods of representing the interests of non-human animals. Something like the concept of political listening was put forward by John Dryzek (2000) as a potential way of acknowledging and addressing the needs of non-human animals. Of course, listening literally and 'aurally' is not the only means of openness to other species. Other kinds of behaviours and expressions can be 'listened to' in the figurative sense, through learning to recognize and interpret signals from other animals. This was suggested by geographer Catherine Johnston (2008), where she argued for a "responsible anthropomorphism" through proximity, observation, and, where relevant, working with other species.

Other species employ forms of imitation, light displays, movements, sounds, gesture, chemicals and scents to convey information to others. Each day, we are learning more about the significance and complexity of these expressions. In her recent book on animal languages, philosopher Eva Meijer (2019) demonstrates the "wealth of animal languages all around us" that can transform how we think about non-human animals. Meijer argues that the fear of anthropomorphism has led us to under-report what we can know from other animals. This has been compounded by a narrow understanding of what we mean by "language." Wittgenstein, she argues, gifted us the "concept of 'language games' – which refers to the entirety of language,

“Only an entrenched belief in a biological hierarchy set by a Christian God prevented us from listening to other species properly or seeing that our own harmful actions against other species might also be viewed as criminal.”

“It is through our natural gifts for interpreting the expressions of others that we enter their worlds and gather the information that gives us the opportunity to meet their needs. We trust this faculty as parents; why do we discount it as formal moral agents?”

individual language practices and very primitive artificial languages.” This concept, she writes, is more “appropriate to thinking about communication with animals as it does not give a fixed definition and is therefore suitable for studying a variety of linguistic actions” (Meijer, 2019: 44–5).

After reading Meijer’s book, I began to pay closer attention to rabbits. What struck me was the absence of the abstract, rational part of my human morality. What emerged through observing these animals running about after each other, avoiding dangers, seeking food, or just resting and looking into the distance, was the transparency of the uncountable motivations of their lives. What my mind responded to was not a rational calculation of feeling or interests but the observable movements of need. It reminded me of what parental attentiveness is like: the same rapid observation–interpretation of the unspoken needs and experiences of an infant. Of course, reasoning matters, but watching other animals properly is a reminder that moral interactions are a form of attention that is largely physical and instinctual. Reading these cues is the beginning of igniting our agency. It is through our natural gifts for interpreting the expressions of others that we enter their worlds and gather the information that gives us the opportunity to meet their needs. We trust this faculty as parents; why do we discount it as formal moral agents?

Anthrozoologist Margo DeMello (2010: 237) reminds us that:

The rabbit-human relationship is one of the most schizophrenic of all human-animal relationships. Rabbits have been sacrificed, hunted, bred, skinned, slaughtered, experimented on, and consumed; they have also been worshipped, cherished, and represented in countless myths, folk tales, children’s books, and pieces of art. But they have rarely been considered as intelligent beings worthy of psychological inquiry.

DeMello argues that rabbits vocalize on only very rare occasions, but that we

can see and learn to ‘read’ how rabbits communicate through their ears, their noses, their tails, their bodies. DeMello notes that rabbits “spend endless hours communing with each other – grooming, nuzzling, playing, ‘gossiping,’ or just hanging out.” She is talking about house rabbits here. But wild rabbits spend huge amounts of time in play too. And, by god, can they scream when they need to. The sound of a young rabbit in the jaws of a stoat is unmistakable. It’s like the whistle of a kettle that hasn’t been removed from the heat. Should we respond to its cry for help? Not necessarily. One of the burdens of attentiveness is also to understand who the message is for.

So, can we do some kind of ‘listening’ on a larger, and more formal scale? I am part of an international group of scholars who have come together during this pandemic to work on a kind of ‘animals’ jury’, which, it is hoped, will be a political form of attention and an instrument of deep listening to colour in the ‘who’ we are talking about when we talk about ‘animals’ or ‘nature’ or the ‘more-than-human’. It will be an effort to pay attention to signals of need and flourishing. It is early days for our group, but the hope is that a replicable method can be created for listening to other species and articulating, as best as possible, these lives that we are affecting. It’s only mechanisms like this that will enable us to see and hear other species properly in the public or political sphere, and thereby guide us in our relationships with them. It is only this kind of mechanism that might enable us to understand and formalize ahead of the act, whether releasing a deadly virus like *Myxoma* is the right thing to do.

There’s no question that it might be a threatening prospect to listen too closely to the lives of those we harm. But as we move forward with development projects, with large-scale conservation initiatives, and with frontier technologies like genome-editing and gene drives, it’s vitally important for our own moral integrity that we find a way to pay attention, both politically and compassionately, to the gestures, cues and articulations of the

other species around us. We may not like what they tell us. But that's the price of reason. ■

References

Bartrip P (2009) The arrival, spread and impact of myxomatosis in Scotland during the 1950s. *The Scottish Historical Review* **88**: 134–53.

Cochrane A (2018) *Sentientist Politics*. Oxford University Press, Oxford, UK.

DeMello M (2010) Becoming rabbit: Living with and knowing rabbits. *Spring: A journal of archetype and culture* **83**: 237–52.

Donoso A (2017) Representing non-human interests. *Environmental Values* **26**: 607–28.

Dryzek J (2000) *Deliberative Democracy and Beyond*. Oxford University Press, Oxford, UK.

Evans EP (1906) *The Criminal Prosecution and Capital Punishment of Animals*. William Heinemann, London, UK.

Ginn F (2014) Sticky lives: Slugs, detachment and more-than-human ethics in the garden. *Transactions of the Institute of British Geographers* **39**: 532–44.

Gray J, Wienhues A, Kopnina H and DeMoss J (2020) Ecodemocracy: Operationalizing ecocentrism through political representation for non-humans. *The Ecological Citizen* **3**: 166–77.

Johnston C (2008) Beyond the clearing: Towards a dwelt animal geography. *Progress in Human Geography* **32**: 633–49.

Lewis CS (1953) *The Silver Chair*. Geoffrey Bles, London, UK.

Low P (2012) *Cambridge Declaration on Consciousness*. Available at <https://is.gd/PITlZC> (accessed February 2021).

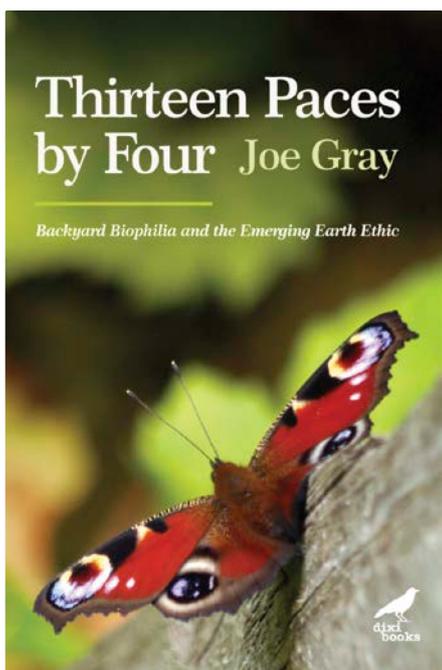
Meijer E (2019) *Animal Languages: The secret conversations of the living world*. John Murray Press, London, UK.

Platt J (2011) Deadly rabbit disease may have doomed Iberian lynx. *Scientific American*, 12 July. Available at <https://is.gd/LsLbgw> (accessed February 2021).

Advertisement (placed at no charge)

NEW BOOK

Thirteen Paces by Four: Backyard Biophilia and the Emerging Earth Ethic



Triggered by the Covid-19 lockdown, the author, a passionate conservationist, finds himself drawing inspiration from goings-on in the **small back garden** of his terraced suburban house, an outdoor space that he has measured at **thirteen paces long by four paces wide**. Contemplating what a **love of nature** really means and implies, the author weaves a narrative of interlinked ideas that are integral to **humanity's positive cohabitation of Earth with the rest of life**.

“A lyrical mix of backyard naturalism, Do-It-Yourself rewilding, eco-philosophical exegeses, and reflections on ‘the storm of now,’ Joe Gray’s work is a grounded meditation on how we can meet the present-day Earth calamity. Without a whiff of didacticism, Gray shows us how to listen, how to care, and how to discover the timeless joys of being Earth citizens. May humanity awaken to the love and awe that unassumingly flow from every page.”

Eileen Crist, Associate Professor Emerita, Virginia Tech

ISBN-13: 978-1-913680-06-0 | www.dixibooks.com/categories/ecology/