developed or conceived, and is perhaps best captured in proposed synthetic biology modifications such as using cloning for genetic rescue of black-footed ferrets (Novak et al., 2024) or consideration of epigenetic modifications as part of human-assisted evolution (cf. Balard et al., 2024). But it also includes addressing challenges whose configurations are only starting to be seen, such as how to calculate future conservation value (Redford & Dudley, 2024), how to incorporate future climates and novel ecosystems in the protected area estate, or developing new models for incorporating biodiversity values. These approaches are overlapping in some of their manifestations (Redford & Adams, 2021) but they currently represent efforts that are, or could be, promulgated by largely different constituencies.

All three of these approaches require a deepening of the vital change that is occurring in conservation, whilst recognizing the overwhelming importance of equitable practices and incorporating human rights (e.g. Newing et al., 2023). The ways in which global change will alter which humans are living where and in what fashion will further challenge the practices of conservation. The global conservation community appears to be solidly behind the improving approach, but the extending and innovating approaches are being discussed only at the periphery of the field and there is considerable resistance, particularly to the innovating approach (Redford & Adams, 2021).

So, perched at the trailing edge of the Holocene, oppressed by the triple assaults of biodiversity loss, climate change and pollution, we are looking for hope from the powerful creativity and passion that fuels the conservation movement: the same creativity that brought Göbekli Tepe, the Neolithic Revolution and the explosion in human civilizations. If conservation is to work, it needs to build a stronger approach, woven of three strands, not one—alive to innovation yet respectful of what is working now.

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References

Baker, A.C., Baums, I.B., Davies, S.W., Grottoli, A.G., Kenkel, C.D., Kitchen, S.A. et al. (2025) Proactive assisted gene flow for Caribbean corals in an era of rapid coral reef decline. *Science*, 389, 344–347.

Balard, A., Baltazar-Soares, M., Eizaguirre, C. & Heckwolf, M.J. (2024) An epigenetic toolbox for conservation biologists. *Evolutionary Applications*, 17, e13699.

Gaynor, T. (2020) Climate change is the defining crisis of our time and it particularly impacts the displaced. unhcr.org/us/news/stories/climate-change-defining-crisis-our-time-and-it-particularly-impacts-displaced [accessed 21 January 2026].

Hoyt, J.R., Langwig, K.E., White, J.P., Kaarakka, H.M., Redell, J.A., Parise, K.L. et al. (2019) Field trial of a probiotic bacteria to protect bats from white-nose syndrome. *Scientific Reports*, 9, 9158.

Jassanoff, S. (2015) Future imperfect: science, technology, and the imaginations of modernity. In *Dreamscapes of Modernity. Sociotechnical Imaginaries and the Fabrication of Power* (eds S. Jasanoff & S-H. Kim), pp. 1–33. University of Chicago Press, Chicago, USA.

Newing, H., Fisher, M., Brittain, S., Kenrick, J. & Milner-Gulland, E.J. (2023) How can we advance equitable, rights-based conservation? *Oryx*, 57, 273–274.

Novak, B.J., Gober, P., Bortner, R., Garelle, D., Wright, M., Chuven, J. et al. (2024) First endangered black-footed ferrets, *Mustela nigripes*, cloned for genetic rescue. Preprint publication. biorxiv.org/lookup/doi/10.1101/2024.04.17.589896 [accessed January 2026].

Ordonez, A., Riede, F., Normand, S. & Svenning, J.-C. (2024) Towards a novel biosphere in 2300: rapid and extensive global and biome-wide climatic novelty in the Anthropocene. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 379, 20230022.

Parks, S.A., Holsinger, L.M., Littlefield, C.E., Dobrowski, S.Z., Zeller, K.A., Abatzoglou, J.T. et al. (2022) Efficacy of the global protected area network is threatened by disappearing climates and potential transboundary range shifts. *Environmental Research Letters*, 17, 054016.

Redford, K.H. & Adams, W.M. (2021) *Strange Natures: Conservation in the Era of Synthetic Biology*. Yale University Press, London, UK.

Redford, K.H. & Dudley, N. (2024) Areas of hope: ensuring the conservation of future values of nature. *Oryx*, 58, 273–274.

Sutherland, W.J. (2019) Kaizen conservation? *Oryx*, 53, 397–398.

Note from the Editor—More research from early-career conservationists

As outlined in the Editorial of the previous issue (*Oryx*, 59, 681–682), our call for submissions from first-time authors resulted in over 30 articles being accepted for publication—more than we can fit into a single issue of *Oryx*. Here, we therefore continue the theme of 'Becoming a conservationist'. The seven articles by early-career researchers in this issue cover a broad range of topics: mammal conservation in Costa Rica and Africa, tree conservation and the effects of roads in Brazil, and the online trade in raptors in Pakistan.

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