

## EDITORIAL

## Making an impact

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Twenty twenty will be remembered for a number of reasons, but mostly not for the reasons we anticipated in twenty nineteen. In a year that was expected to be all about global political decisions and initiatives to tackle the current biodiversity crisis and climate breakdown, we ended up seeing an unknown virus dramatically change our world: within a few months, the ways we work, live, communicate and think about the future have literally shifted to a new normal. What we have also witnessed, however, is the scientific community coming together to address a complex problem and produce knowledge and solutions at a record pace. Levels of creativity and ingenuity in the face of a global pandemic have been particularly high; in many respects, this boost in innovation can be traced back to the higher occurrence of interdisciplinary discussions facilitated by Covid-19.

This idea, that bringing people from different scientific backgrounds together can help advance more rapidly the way we think about the functioning and management of our world, was, and still is, the basic tenant of why *Remote Sensing in Ecology and Conservation* exists. To an untrained eye, satellite remote sensing, passive acoustic monitoring and camera traps have very little in common, yet the flux of exchanges between users of these technologies has been constantly increasing over the past years, leading to rapid advances in the ways we derive ecologically relevant information from these sensors. Similarly, few would have predicted that conservation biologists and remote sensing specialists would end up reading, and publishing in, the same peer-reviewed journals, yet the increasing level of submissions and broadening readership of our journal demonstrate that there definitively is appetite for outlets that facilitate a conversation between a diverse range of sensor developers, programmers and remote sensing data users.

As we celebrate our first impact factor, which reflects the quality of the science we expected to publish from day one, our thoughts are with our authors, who trusted our journal despite its lack of impact factor. Over the past years, we have seen scientists from all over the world and multiple disciplines submit genuinely fascinating contributions that have captured, in many instances, the imagination of their peers. From extending the use of camera trap approaches

to the monitoring of terrestrial squamate assemblages (Welbourne et al. 2017) to demonstrating how remote sensing of three-dimensional coral reef structure can enhance predictive modelling of fish assemblages (Wedding et al. 2019), and from developing a measurement protocol to identify the spectral reflectance of whale skin above the sea surface (Cubaynes et al. 2020) to showing how bird roosts could be automatically detected using NEXRAD radar data and convolutional neural networks (Chilson et al. 2019), our authors have pushed the limits of what can be learnt from existing sensors, and by doing so helped inform global discussions about the role of technology to support global biodiversity monitoring efforts.

Their innovative research has helped manage and conserve wildlife, should it be humpback whales *Megaptera novaeangliae* in Australia (Bolin et al. 2020), Weddell seal *Leptonychotes weddellii* in Antarctica (LaRue et al. 2020), fish in temperate lakes (Mouget et al. 2019) or bats in the Amazonian rainforest (Torrent et al. 2018). But their work has also helped formulate the design of the monitoring approaches considered by others, providing key guidance to people making a leap of faith in the unknown by giving a go to technologies and algorithms they have never used before. This is well exemplified by the contribution of Duffy and colleagues (2018), who helped people appreciate some of the key issues to be considered when using lightweight drones in challenging environments; or by the contribution of Piña-Covarrubias and colleagues (2019), who described ways to optimize sensor deployment for acoustic detection and localization in terrestrial environments. Similarly, the work by Pasquarella and colleagues (2016) helped demonstrate how time series of all available Landsat observations could be leveraged to map and monitor ecosystem state and dynamics, thereby illustrating current prospects available to environmental managers and ecosystem ecologists. And then there's the review by Caravaggi and colleagues (2017), which helped identify present and future opportunities to advance conservation behaviour research using camera trapping.

Securing an impact factor is a big step for a peer-reviewed journal, but ultimately this accomplishment

reflects the achievement of a whole community. To forge a path from the decision to start the journal in 2014 to this moment in time has indeed required trust in the overall endeavour from a multitude of people (authors, reviewers, editors), who decided to invest time and energy in something new despite having no guarantee of return. Many took the risk and helped us publish contributions that, taken as a whole, provide an incredible resource for scientists, managers, educators and policy makers interested in understanding and advancing opportunities to monitor and predict the dynamics of our natural capital globally. This success is their success. The future success of this journal will likely be yours.

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