Environmental Conservation

# CALL FOR PAPERS for a thematic issue on 'Invasive species and protected areas' Submission deadline 1 March 2020

Protected areas are a vital element in a broad suite of conservation strategies against biodiversity loss, despite suboptimal outcomes in some contexts. Not long ago many were conceptualised as ecological and biodiversity islands little affected by the changes and pressures in the surrounding landscapes. Nowadays it is fully appreciated that protected areas (PAs) are not isolated from and immune to external pressures such as water abstraction, wild fires, air pollution, straying livestock, and, of course, global climate change.

A widespread driver of biodiversity change and loss worldwide, at all scales from genetic to landscape, is invasive species (Bellard et al. 2016). It is therefore not unsurprising that their effects are also increasingly apparent in PAs, with the first comprehensive synthesis in the late 1980s (e.g. Usher 1988). The effects of invasive species on PAs may be manifest directly or indirectly, and may be spatially located within the boundaries of the PA or external to it. Direct effects are those imposed by expanding populations of invasive species actually within PAs, where they may out-compete or prey on native species with the PA. Indirect effects are expressed through the alteration of food supply, habitats and ecosystem processes in a way that reduces the suitability for one or more native species in the PA. In some cases invasive species can result in regime shifts (Gaertner et al. 2014), which are likely to be more detrimental in PAs than human-dominated ecosystems. The effects of invasive species may also be apparent within some PAs even though the invasive populations are external to the PA. For example invasion of riparian areas upstream can reduce streamflow of rivers into and through a PA, thereby affecting riparian communities and species in the PA. Or, high biomass accumulation by invasive species can result in increased fire frequencies or more intensive fires in the surrounding areas which then burn into the PA (Brooks et al. 2004). Another view might be that invasive species are here to stay (on economic, semantic, moral and management grounds), and their presence in PAs is simply a reflection of the broader contexts in which PAs exist, embedded in the notion of novel ecosystems. In such a framing, they may be viewed as adding to biodiversity in PAs rather than threatening it (Thomas & Palmer 2015).

There is growing recognition of the effects of invasive species in and on PAs (e.g. Foxcroft et al. 2013; 2017), although many questions remain, and management responses are absent or wanting in many regions. Consequently, the purpose of this call for papers is to continue to develop this emerging research, management and policy arena, through profiling high quality science and debate that will contribute to better models, predictions and understandings of the context-specific effects of invasive species on PAs and thereby catalyse appropriate, locally embedded management and policy responses. We envisage a broad array of papers from different continents, biomes, landscapes, contexts and with a range of invasive species threats within, neighbouring to and more distant from PAs. Papers from social, economic and ecological disciplines and interdisciplinary studies are welcome provided their relevance to the theme is clear and is the primary focus of the paper. Potential themes or questions include:

- Can scale dependent threats of invasive species to PAs be systematically assessed?
- What contexts or types of PAs are likely to be the most vulnerable?
- Are PAs in urban settings more prone to invasive species than PAs in rural settings?
- What ecosystem services in PAs are most affected by invasive species?
- When might PAs be prioritised over non-PAs sites for invasive species control or eradication?
- Do PAs contain fewer invasive species, even in the absence of invasive species control measures?
- What types of PAs or management approaches may make them more resilient to invasive species?
- What approaches have been tested to minimise threats posed by invasive species external to PAs?
- How might the effects of invasive species in PAs be altered by climate change?
- Is there a role for citizen science in profiling the threats of invasive species in and to PAs?

- How does the presence or effects of invasive in PAs affect visitor appreciation?
- How might increasing numbers of visitors to PAs effect the introduction of invasive species?
- How do indigenous communities with rights in specific PAs view the invasive species?
- Do invasive species in PAs alter sense of place?
- What social or ecological barriers constrain responses to invasive species in and around PAs?

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**Submission Guidelines**: Standard Research papers (max 6,000 words) are of particular interest but Reviews (max 8,000 words), Reports (max 4,000 words) and Comments (max 2,000 words) may also be relevant. It is essential to abide by the Instructions for Contributors (www.cambridge.org/core/journals/environmental-conservation/information/instructionscontributors), submit via the web site (https://mc.manuscriptcentral.com/envcon) and indicate a paper is for the 'Invasive Species and Protected Areas' theme. All papers are subject to rigorous screening and peer-review. Abiding by the schedule of dates below will facilitate access to the thematic issue, otherwise they may be stand-alone papers.
**Important Dates**: manuscript submission deadline 1st March 2020; submission of final revised paper 1st September 2020