**Intro**

In 2016, investment into conservation was estimated to be $52 billion per year, and recent estimates have suggested that $700 billion per year will be required to ensure healthy ecosystems across land- and seascapes (Deutz et al., 2020). Although global estimates such as these are unlikely to be accurate, for example because of large extrapolations and generalisations over large spatial scales, the order of magnitude conveys the scale of the funding challenge.

The simplification of models to develop and test theory has been seen as an important approach for decades (Levins, 1966), with the understanding that building models that are all at once manageable, general, realistic, and precise is impossible. The importance and utility of simple theoretical models is easily forgotten in this age of exponentially increasing computing power and advanced statistical techniques, which allow researchers to move towards increasingly complex models and analyses. However, adding complexity and detail to models is not always the best approach as increases in complexity require more data and computation time, analysis and interpretation become more difficult, and the ability to generalise is lost (Green et al., 2005).

Effectively managed protected areas are the cornerstones of landscape-level conservation, yet up to 75% are severely underfunded (Coad et al., 2019). Insufficient funding of protected land- and seascapes leads to poor management, ecological damage, and the loss of species and habitats (Kearney et al., 2020; Pringle, 2017). It is difficult to design and implement effective conservation action that targets the correct drivers at the correct spatial and temporal scales when available funding is based on short-term projects and is consistently below what is required (Tulloch et al., 2020). In the absence of dramatic increases in the duration or continuity of funding, or the scale of resources available to landscape managers, studies that explore the trade-offs between different strategies for investing existing resources over longer time scales will be critical.

In landscapes where harvesting of wildlife occurs, weak management and regulation, which are common symptoms of chronic underfunding, can increase the probability of population collapse of the harvested species (Fryxell et al., 2010).