

# The evidence and values underlying ‘new conservation’

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Protecting nature and preventing extinction are goals all conservationists share, but intrinsic value is not the only, and may not be the most effective, rationale conservation can offer. Unfortunately, Doak *et al.* [1] mischaracterize our recent writings on this subject as embracing ‘only economic motivations’ and ‘saving only those components of nature that directly benefit people’. The ‘only’ embedded in these misrepresentations appears only in the minds of Doak *et al.* rather than in anything we have written. In fact, what Doak *et al.* label as ‘inconsistencies’ or ‘equivocation’ reflect our belief that conservation is not a zero-sum game, there is not a single way forward, and we should augment rather than abandon current conservation practice. We favor a mixture of approaches.

We agree with Doak *et al.* that conservation undoubtedly has made a difference. The amount of degradation and number of extinctions would certainly have been greater were it not for efforts to date, including environmental laws such as the US Endangered Species Act. However, Doak *et al.* present a portrait of conservation triumph that is inconsistent with facts on the ground and reveals a strong North American bias. The world fell far short of the ‘2010 target’ to reduce the rate of biodiversity loss and conservationists regularly bemoan the unabated extinction crisis. Although protected areas now cover a significant portion of the globe, they are disproportionately located in places people had little use for otherwise. Even so, there is growing pressure to loosen restrictions and even degazette protected areas around the world [2]. Moreover, it is unclear how effective protected areas truly have been. Outside Ulaanbaatar, Mongolia, the world’s oldest national park is marred by illegal housing developments. In Indonesia, oil palm plantations are cropping up within national parks. Although deforestation is indeed slightly lower within protected areas than in well-matched unprotected areas, the difference is far less than originally anticipated [3] and recent data show extensive deforestation within Latin American protected areas [4]. Recently, the most accurate global assessment of deforestation yet conducted found that forest loss is increasing [5]. Brazil, a bright spot in terms of halting deforestation, recently changed its legal framework in a way that could undermine

their achievements [5]. Thus, although we agree that traditional conservation approaches have made a difference, we also worry that the successes are vulnerable and do not rise to the level needed given the scale and scope of threats to biodiversity and ecosystems. Furthermore, although many conservation efforts do benefit local communities, there also continue to be examples of human marginalization for the sake of conservation (e.g., [6,7]). In light of this, we argue that conservation needs to expand its toolbox and its support base. In no way does expansion imply a subtraction of traditional rationales for or approaches to conservation.

## Broadening the motivations and support base for conservation

We agree with Doak *et al.* that both ‘new’ and traditional conservation approaches are grounded in values. However, Doak *et al.* incorrectly portray new conservation as primarily valuing economic gain and displacing concern based on nature’s intrinsic value. This is not a debate between good people with selfless values on the one hand and self-interested people preoccupied with money on the other. We agree with Doak *et al.* that values-based appeals are highly effective [8], but conservationists must recognize that people are motivated by many different values, including deep concern for the unemployed and the poor, along with a desire for greater equity. It is not a winning strategy to pit good values against each other. Our hypothesis is that the conservation movement will achieve greater success if it can leverage concern for humanity into action for nature. For example, over the past decade, The Nature Conservancy has used appeals for clean water, a healthy environment, and opportunities for children to help the passage of state ballot measures that raised over US\$40 billion for conservation. This is hard evidence that appeals to human benefits (with no mention of nature’s intrinsic value) can deliver impressive conservation results. Such appeals could potentially strengthen and broaden the support base for conservation because although concern for nature cuts across demographic and political groups, support tends to be weak in the sense that the environment rarely rises into respondents’ lists of top concerns (<http://www.aei.org/paper/politics-and-public-opinion/polls/polls-on-the-environment-energy-global-warming-and-nuclear-power-april-2013/>). Moreover, US Republicans, Hispanics, and African-Americans favor messages that emphasize nature’s benefits to people rather than its intrinsic value [9]. Finally, it is hard to argue that the conservation and environmental

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movements are strong in the USA when the Congress will not bring significant climate legislation to a vote and many polls have detected declining support (<http://www.aei.org/paper/politics-and-publicopinion/polls/polls-on-the-environment-energy-globalwarming-and-nuclear-power-april-2013/>).

### Expanding the conservation toolbox

One strategy we have recommended to supplement traditional approaches is partnering with business. Clearly there are risks to this strategy; however, we see hopeful signs. The number of businesses issuing sustainability reports grew from 26 in 1992 to nearly 6000 in 2012 (<http://www.corporateregister.com/downloads>). Mainstream investors increasingly factor environment and sustainability information into investment decisions ([https://www.bsr.org/reports/BSR\\_Trends\\_in\\_ESG\\_Integration.pdf](https://www.bsr.org/reports/BSR_Trends_in_ESG_Integration.pdf)). A 2012 survey of 4000 business leaders revealed that nearly half of the companies involved changed their business practices to be more sustainable, with reasons ranging from customer preference (52%) to concerns about resource scarcity (37%). The top benefits realized from pursuing sustainability were better brand reputation and improved innovation. The growing importance of corporate brand and reputation provides a lever with which to influence corporations to take conservation seriously. Working with business is one of many potential strategies to try to achieve success on a scale that really moves the needle. We are not sure it will work and we certainly acknowledge the risks, but we think that some new approaches are needed.

In an ideal world, conservation would prevent all extinctions. Assuming it cannot, we need some way to prioritize

what and where to protect. We have advocated prioritizing places where protecting nature can improve conditions for poor and vulnerable communities. We think such a strategy will grow people's appreciation for both the instrumental and the intrinsic values of nature. Similarly, protected areas will continue to be important, but protected areas alone are not likely to be enough and must be supplemented with new strategies. Challenging a field to do better is not an attack or 'denigration' but is an attempt to encourage innovation and experimentation. We stand by our hypotheses that conservation will do better by embracing benefits to people and working with, rather than against, corporations. Let outcomes on the ground be the arbiter of this debate.

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## Moving forward with effective goals and methods for conservation: a reply to Marvier and Kareiva

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We welcome the added nuance that Marvier and Kareiva have included in their response [1] to our analysis [2] of New Conservation Science (NCS). However, we take issue with multiple points that they raise. In particular, we do not believe that our arguments in any way 'pit good values

against each other' or that we have painted conservation to date as a string of unqualified success stories. Nonetheless, we are glad that they now appear to embrace many of the same fundamental goals, strategies, and motivations that have long characterized conservation. If this were the message put forth in previous articles and interviews, NCS would not have stirred up the acrimony and confusion that has, in our view, hindered progress and disheartened many in the conservation community.

Marvier and Kareiva still stress the effectiveness of human-centered conservation. We reiterate that we believe that this strategy has always had an important

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