THE SHIFTING MOTIVATIONS AND TACTICS OF CONSERVATION, AND HOW TO RECONCILE THEM

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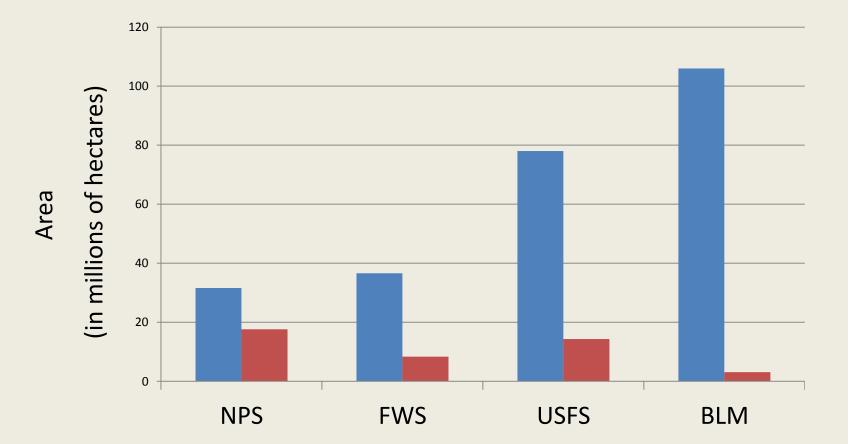
Historically, Conservation Efforts have been based on:

- Multiple strategies. e.g.:
 - Forest management
 - Wildlife management
 - Fisheries management
 - Preservation/restoration of natural ecosystems
 - Targeted efforts to save endangered species

- Multiple core motivations:
 - Anthropo-philic
 - Bio-philic

What is the *dominant* strategy or motivation?

The answer is pretty clear:



Doak et al. 2014

Nonetheless, many attempts to discredit the *minor* theme in tactics and motivation: Protecting nature & biodiversity for its own sake.

Much more recently, a push to discredit these non-anthropocentic approaches from *within the conservation community* itself. Evidence? First, mission drift of Big Conservation NGOs

<u>Conservation International</u> ...empowers societies to responsibly and sustainably care for nature, our global biodiversity, for the well-being of humanity.

<u>The Nature Conservancy</u> ... conserve the lands and waters on which all life depends . Our vision is to leave a sustainable world for future generations.

<u>World Wide Fund for Nature</u> ...build a future in which people live in harmony with nature...

In contrast, an old TNC mission statement: ...to preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

(See Morrison 2014, Conservation Biology for more examples)

And a more direct effort led by some NGO and academic scientists to claim that "*Protecting biodiversity for its own sake has failed*" and to propose a "new conservation science":

"The ultimate goal is better management of nature for human benefit."

"21st century conservation tries to maximize biodiversity without compromising development goals"

"Instead of pursuing the protection of biodiversity for biodiversity's sake, a new conservation should seek to enhance those natural systems that benefit the widest number of people..."

(Quotes by Kareiva and Kareiva et al. see Doak et al 2014 for sources)

So, what is the problem with this movement in conservation?

- It has claimed to be something new in conservation, which it is not.
- Much of the diagnosis of the state of conservation is flawed (see Doak et al. 2014)

More to the point:

Is this a good way to advance conservation?

There are two levels at which to address this question:

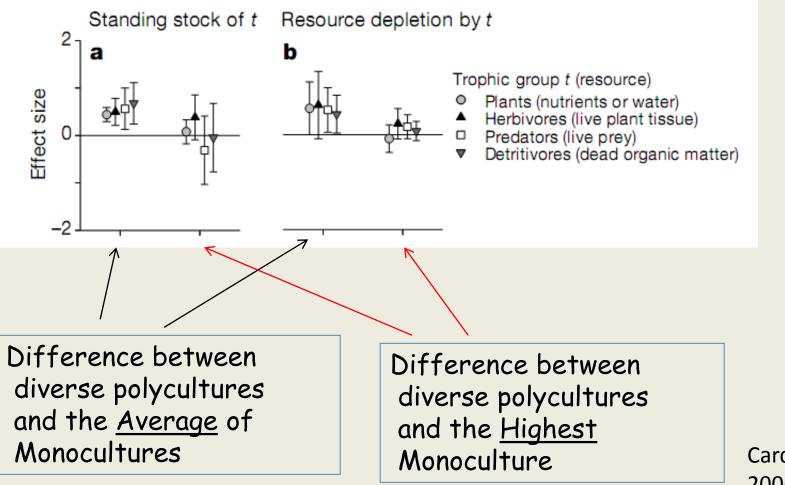
1st: The question of Efficacy:

If we assume that conservation's goal is really to prevent extinctions and preserve ecosystems: Are Anthropo-philic approaches – <u>alone</u> – **sufficient** or **effective** for conserving "nature" writ large?

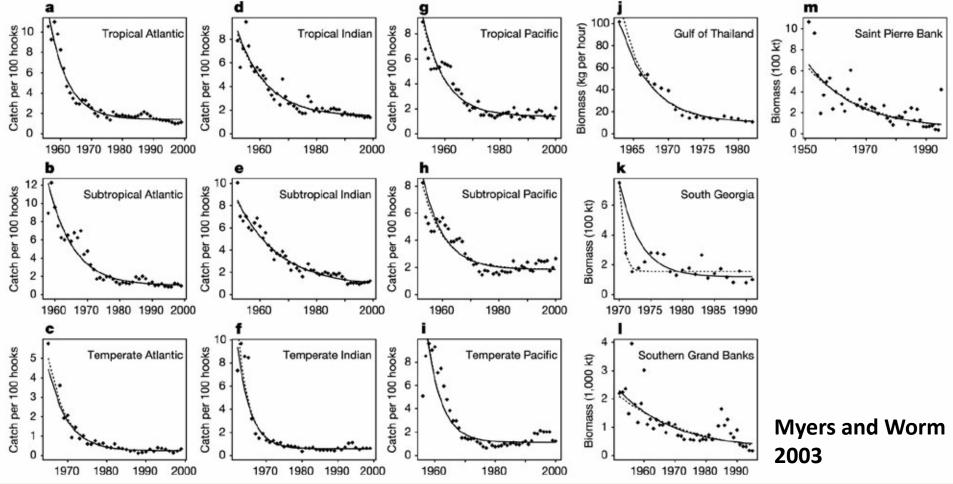
There are many reasons to think that the answer is no.

A. Hard Science. Do you need more species or natural communities to have high ecosystem services?

A review of 111 studies looking for effects of biodiversity on ecosystem functioning (read: ecosystem services)



Cardinale et al. 2006 B. There are many examples of parts of the nature with high economic value being deeply overexploited. e.g., the management of some of the most clearly valuable species on earth – fish.



Note that this is not an argument that economic reasoning can't work....

Also, when the big fish are gone, do people value them enough to want to restore their populations, for their utilitarian value? Go to Spain to get the answer:



C. Will economic analysis *reliably* prioritize the long term preservation of species or communities?

Colin W. Clark. 1973. Profit Maximization and the Extinction of Animal Species. Journal of Political Economy 81: 950-961

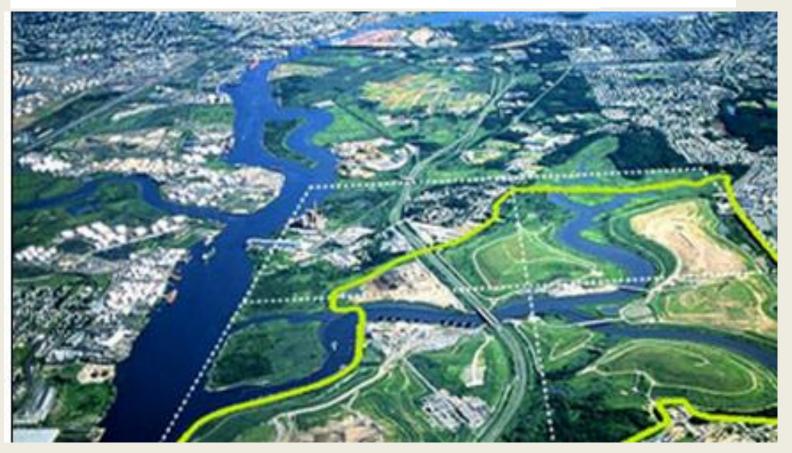


(also see W.M. Adams, Science October 2014)

Similarly for ecological communities:

Former Landfill, a Park to Be, Proves a Savior in the Hurricane

By MICHAEL KIMMELMAN Published: December 17, 2012



This suggests that economic value can be a good add-on but not a good sole motivation for conservation (see W.M. Adams, Science 2014)

The second approach to addressing the shift towards narrowed conservation motivations:

Is it somehow more "right" to focus just on people?

- This is a key argument of the 'new conservation science' proponents.
- The rationale is
 - <u>partly</u> that people only care about people, and we shouldn't try to change their minds,
 - <u>partly</u> that nature should never come first if there are human needs to fill.

This argument ignores a lot of sociological and historical information:

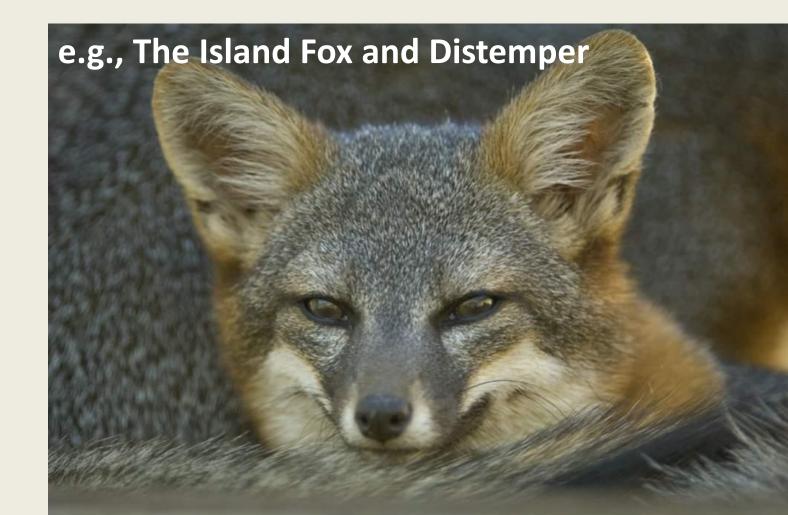
A. There is a long history of *gradually* (and with reversals) extending the idea of intrinsic rights and value to wider and wider groups:

B. There are many successful campaigns to <u>rapidly</u> change perceptions of right and wrong. e.g.,

- Ending slavery,
- Extending gay rights, endorsing gay marriage
- Animal rights
- Stopping the feather trade,
- Not torturing your captured enemies

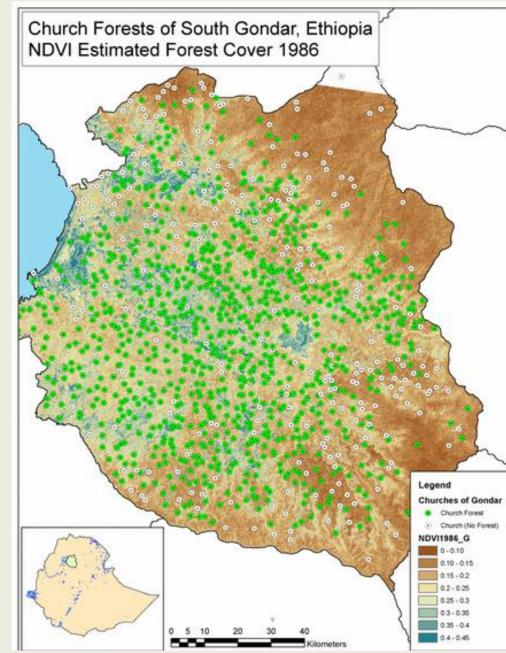
Perhaps the most compelling argument for keeping intrinsic value as a motivation:

This goes far beyond instrumental values of nature in saving biodiversity, *including the ecosystem service of aesthetic value*



Also: The goal is **extremely long-lasting conservation**, and this can result from moral or religious conviction





In summary:

- There is no deep, inherent conflict between different motivations for conservation
- But, there many reasons to think that anthropocentric motivations *alone* will be ineffective and insufficient to conserve most species or communities.

The most important questions to ask:

- How to prevent short-term losses while planning for longterm – very long-term -- protection and motivation for protection?
- In a world of very limited resources, who will argue for the majority of nature, if conservationists decide that they too will prioritize human needs?