



# The Future of Arctic Biodiversity Assessments: Exploring New Ways to Shorten the Time Between Information and Action

**Mike Gill**

*Vice-Chair*, Group on Earth Observations  
Biodiversity Observation Network





# The Future of Biodiversity Assessments: Exploring New Ways to Shorten the Time Between Information and Action

**Mike Gill**

*Vice-Chair*, Group on Earth Observations  
Biodiversity Observation Network





# Or: Why does it take so long to convert information to knowledge to decision? What are the solutions?

**Mike Gill**

*Vice-Chair*, Group on Earth Observations  
Biodiversity Observation Network



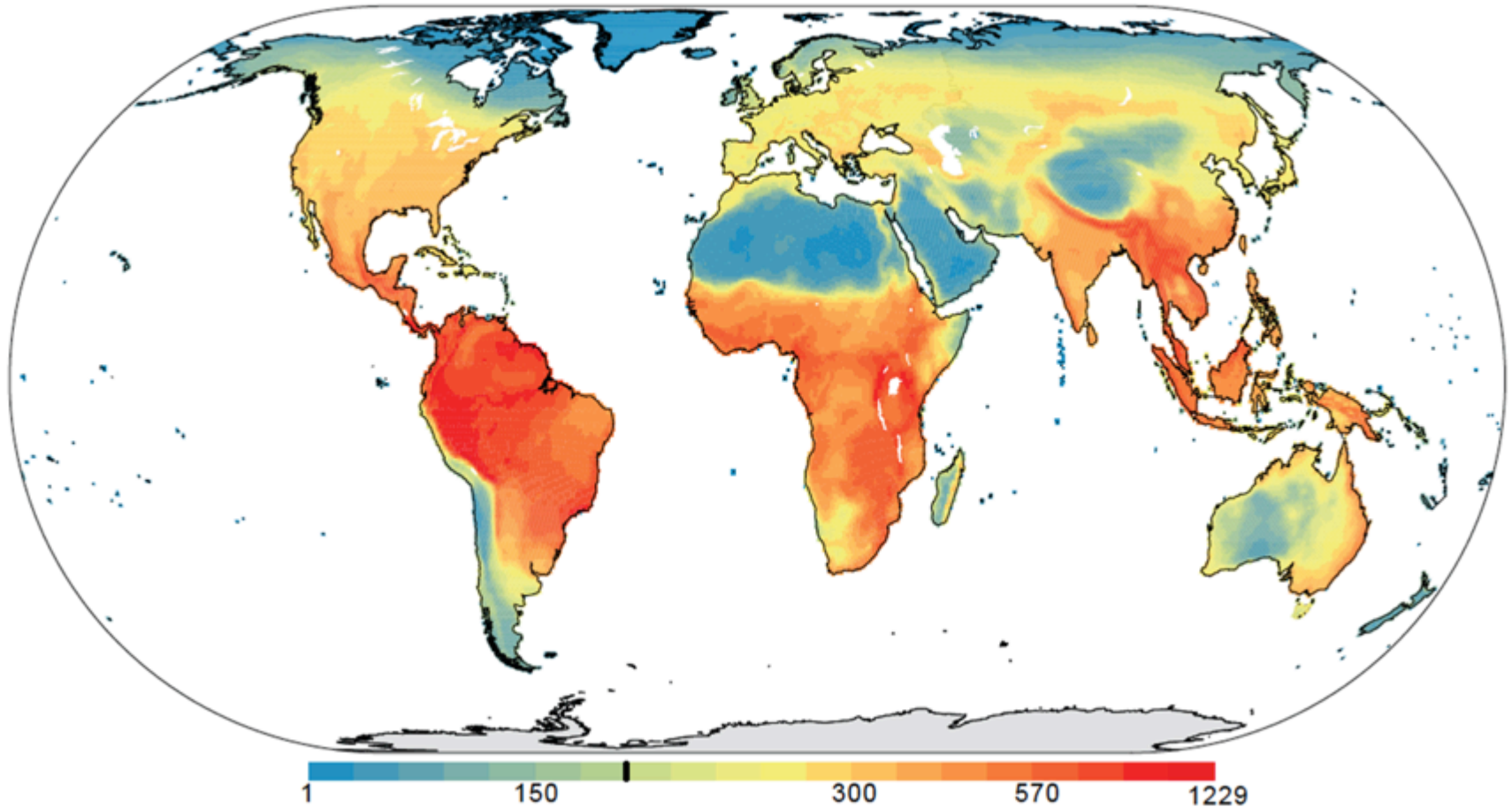
# Current State of Biodiversity Observations

- **Limited, patchy and often hidden data:** Biodiversity information is spatially and temporally patchy, difficult to discover and hard to synthesize
- **Limited capacity:** nations challenged to develop and sustain monitoring programs and keep up with continually changing sensors and methodology
- **Limited integration:** ground and remotely sensed info could be better harmonized within and between nations
- **Weak links** between data collectors and policy-makers



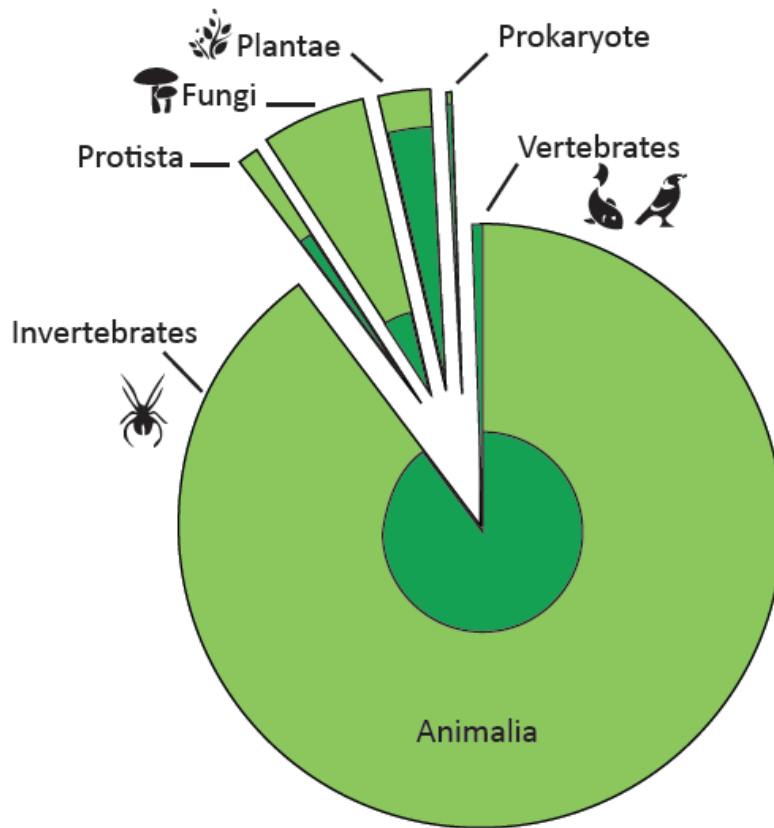
# Gaps in biodiversity monitoring

Living Planet Index  
Vertebrate Species Richness

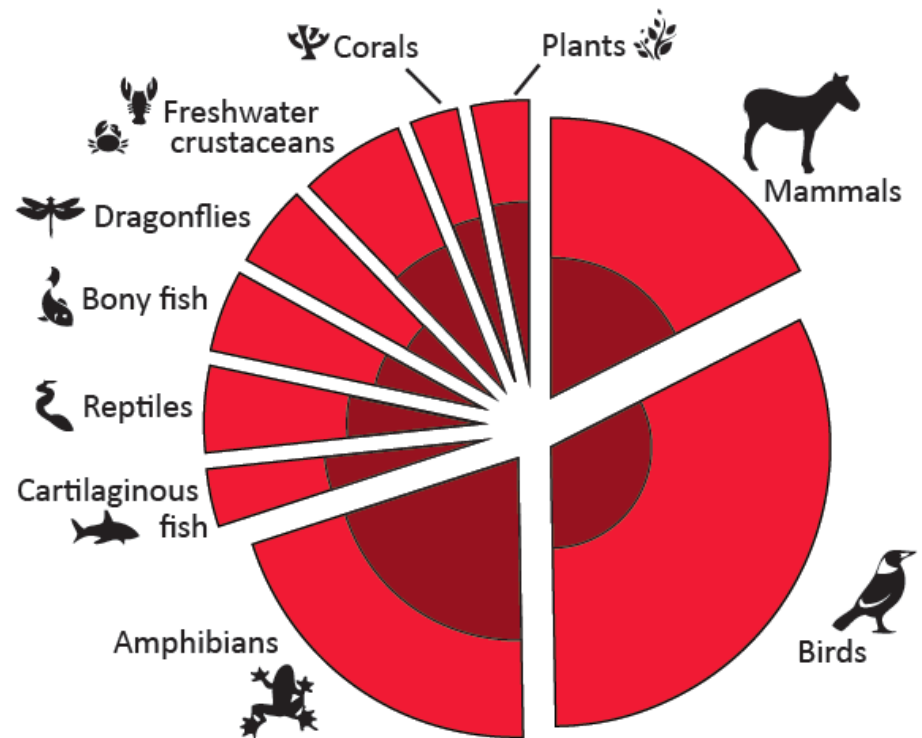


# Taxonomic gaps

## Estimated species richness



## Species assessed in the Red List



# Poor Data Resulting in...

- Limited and often, ill-informed conservation and development decisions
- Untapped potential for using earth observation data to support effective decision-making

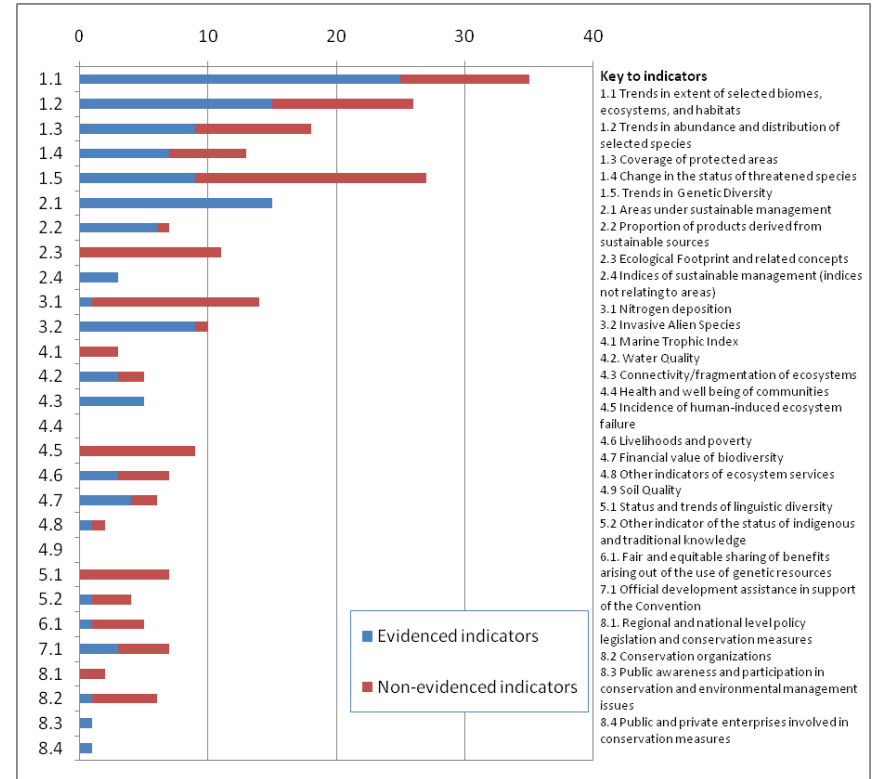


Figure 10: Number of CBD Parties reporting 'additional' indicators to CBD global indicators in 4<sup>th</sup> national reports, within CBD headline indicator categories

Bubb, P., et al. (2011) National Indicators, Monitoring and Reporting for the Strategic Plan for Biodiversity 2011-2020. UNEP-WCMC, Cambridge.



# Data to Decisions: Other Barriers

- Limited understanding & dialogue between information producers & info users/decision-makers
- Slow process of collecting, publishing and synthesizing biodiversity data in formats for decision-makers
- Conservation results do not match political timelines
- Limited understanding of the value of biodiversity (i.e. 'conservation comes at a cost')
- Structural: limited ability to discover and access information



# ABA Recommendation 4

**4. Require the incorporation of biodiversity objectives and provisions into all Arctic Council work and encourage the same for on-going and future international standards, agreements, plans, operations and/or other tools specific to development in the Arctic.**



# Questions for Solutions

- How do we **better design** research and monitoring to meet user needs?
- How do we **improve discovery** of useful information?
- How do we facilitate **more streamlined delivery** of information into decision-making processes?
- What are the obstacles and how do we overcome them?





**Takk!**

