

## About the Global Biodiversity Informatics Outlook



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# **Why do we need a Global Biodiversity Informatics Outlook?**

**The Global Biodiversity Informatics Outlook (GBIO) offers a framework for reaching a much deeper understanding of the world's biodiversity, and through that understanding the means to conserve it better and to use it more sustainably.**

# The GBIO framework



# Focus Area: Culture



- The context for sharing digital knowledge
  - Data must be **available for reuse**
  - Data must **follow standards** to support discovery and use
  - Data must be **preserved for future uses**
  - **Policies and practices** must reinforce open use
  - The whole community should collaborate to **curate data**
- Issues shared in common with all research domains
- Investments here will multiply value of other components

# Focus Area: Data



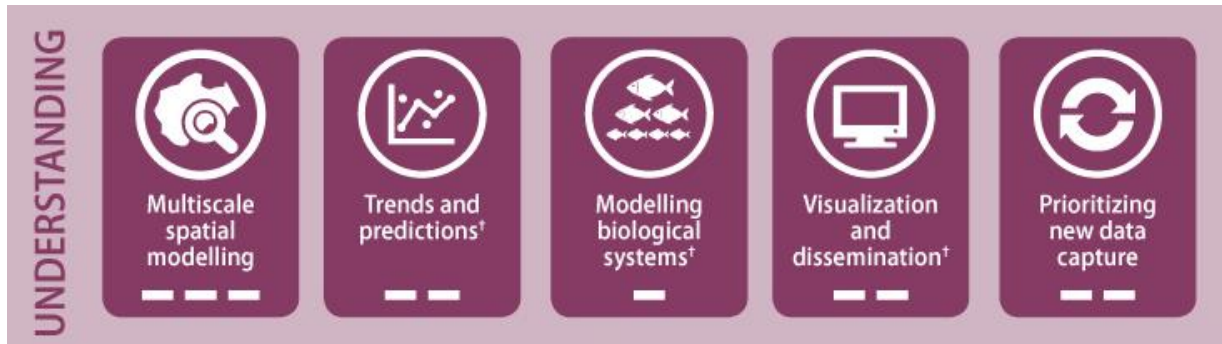
- The streams of primary biodiversity data
  - **Literature** and journals
  - Natural history **collections**
  - Professional and amateur **field observations** and surveys
  - Molecular **sequencing**
  - **Remote sensing** (including camera traps, acoustic monitoring, etc.)
- All deliver fundamental observations and measurements of biodiversity
- Foundations for analysis and understanding

# Focus Area: Evidence



- Organised views of biodiversity data
  - Consistent assessment of **quality and fitness-for-use**
  - Comprehensive digital **nomenclature and taxonomy**
  - Access to all evidence for recorded **species occurrence**
  - Access to species **traits, measurements and interactions**
  - **Services and interfaces** to access data as needed
- Provide comprehensive organised views of all relevant data
- Act as a “lens” into primary data

# Focus Area: Understanding



- The application of data to address questions
  - Integrate data into **spatial models**
  - Develop **temporal analyses**
  - Incorporate **biological reality** into models
  - Present **compelling representations** of biodiversity
  - Optimise **future investment** in biodiversity informatics
- Data-driven models for science and planning
- Integrate biodiversity with other research and data domains



# What to do with the GBIO?

If you're a...

- policy maker
- Funder
- National node / data centre
- Data custodian / owner
- Researcher
- Informatician / IT Professional
- ....

# In conclusion

GBIO must be owned by everybody!

