Data for Biodiversity:

Requirements of an Effective Support System for Policy and Management and under Current Climate Change

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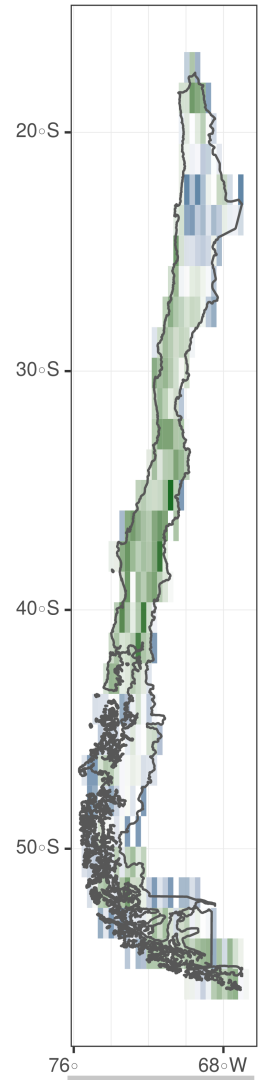
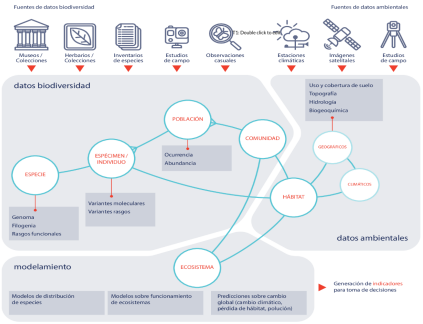


Number of species records in Chile in GBIF

Why?

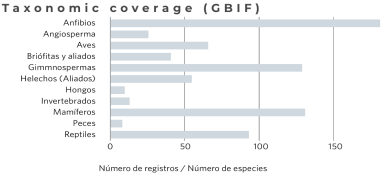
- The lifecycle of data makes the management of biodiversity information essential for the protection of our biota
- Knowledge on biodiversity is not limited to the description of organisms and its surroundings
- Expanding our understanding of nature is contingent on developing simple, scalable infrastructure for the indexing, integration and the analysis of biodiversity data
- Hosting and Managing such infrastructure will deepen our knowledge and foster new discoveries

How?

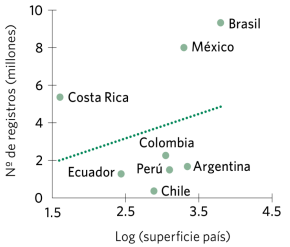


Current Sources of biodiversity Information for Chilein (GBIF)

Taxonomic coverage (GBIF)



Specimens in biological collection by country



Necessities

- To develop a policy of open access of biodiversity information
- To define standards and protocols for the data exchange and analysis
- Improve connectivity to international servers
- Enhance the quantity and quality of biodiversity information and data
- Develop essential infrastructure (i.e. human and material) for the integration and analysis of the various existing sources of biodiversity data
- Develop capacity-building programs in biodiversity data science that includes curatorial, remote sensing, data interoperability, high throughput modeling of climate and biota.

Recommendations

National Biodiversity Observatory for the Analysis and Management of Data should consider:

- Remote Sensing
- Field Research Network
- Ecosyst Dynamics Monitoring
- Biodiversity Genetics and Genomics
- Mathematical Modeling

For Public Policy

- Classification / Sensitivity
- Data access / Protection
- Data Stewardship
- International engagements