



Lifemapper 2.0

Species Data Archive
and

Data and Analysis Services

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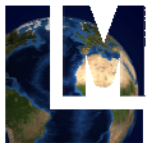


LifeMapper



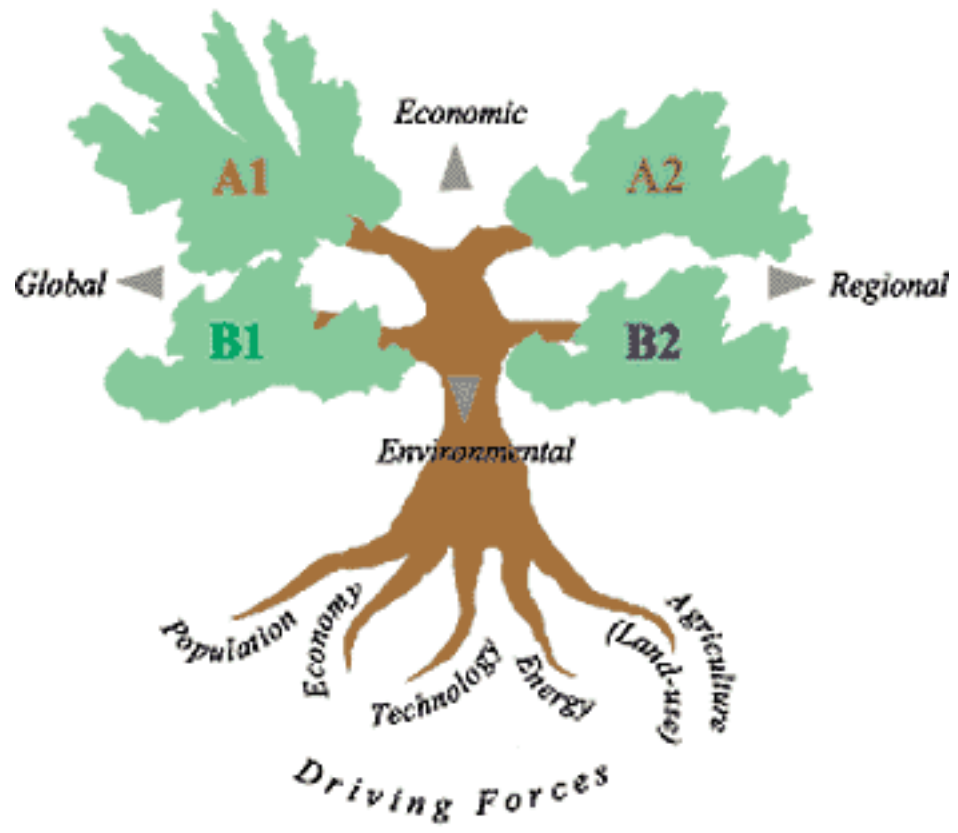
Overview

- Species Data Archive
 - Ecological Niche models and projections
 - Climate Data
 - Digital Occurrence Data
- Data and Analysis Web Services
 - All data and metadata
 - Modeling & Spatial Analysis





SRES Scenarios





GBIF Occurrence Cache

- Gathered with DiGIR
- 200+ institutions
- Local cache
- Single point access
- Single format





Data Browsing



LifeMapper



Aplodinotus grunniens



Freshwater Drum (*Aplodinotus grunniens*)

Konrad P. Schmidt



LifeMapper



Model / Projection Archive

- Created with openModeller
- Occurrences X Algorithms X Scenarios
- Data and Metadata
 - Exposed via webservices
 - Clients include LM website



On-demand Modeling service



LifeMapper



Arnica cordifolia





Google Earth



LifeMapper



How does it work?

- Input data: Point / Environmental
 - LM cache or User provided
- Pipeline
 - packages inputs
 - sends to **Modeling** service
- Compute cluster
 - Accepts request
 - Computes experiment
 - Returns data





What does the future hold?

- User inputs
- More algorithms
- Quality assessment
- Desktop client
- Education
- Open Science Grid

