

Research



Citizen science





International agreements







National and local reporting





Site management



Policy



Data capture and recreation

Data

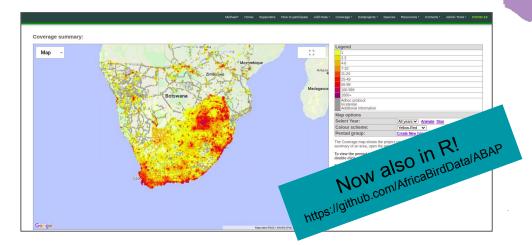
Indicators

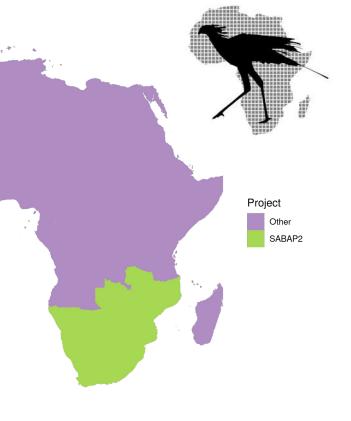
Decisions

Southern African Bird Atlas Project



- 2007-ongoing
- Detection/non-detection
- ~17.6 million records
- 14061 of 16708 pentads (5' x 5')

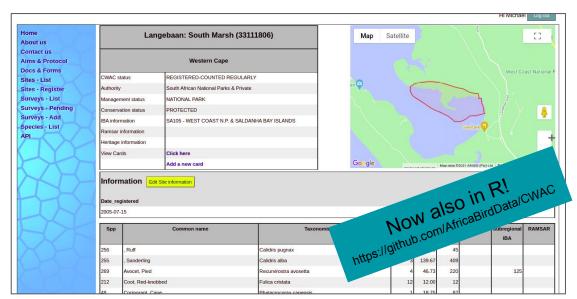


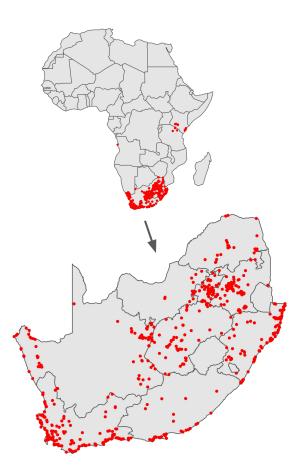


Coordinated Waterbird Counts



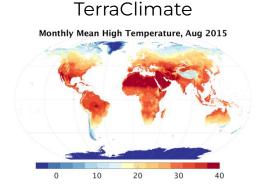
- 1992-ongoing
- Abundance
- ~347,000 records
- 739 sites



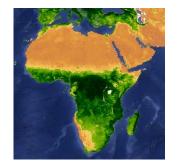


Supporting information

Google Earth Engine



MODIS veg. indices



JRC surface water



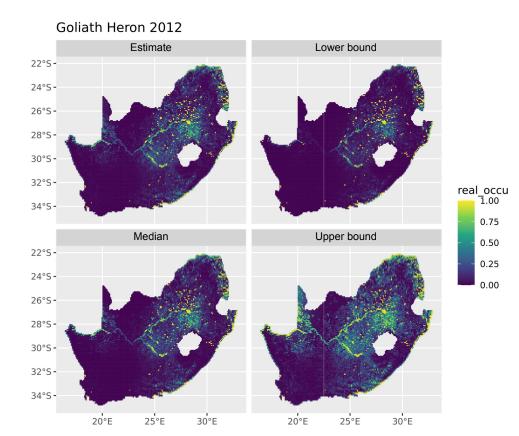
Wetland inventory





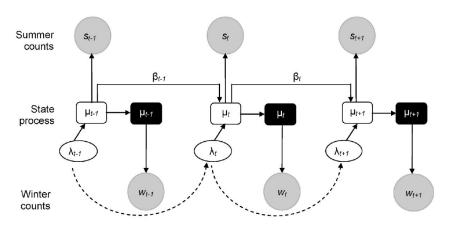
Species distribution

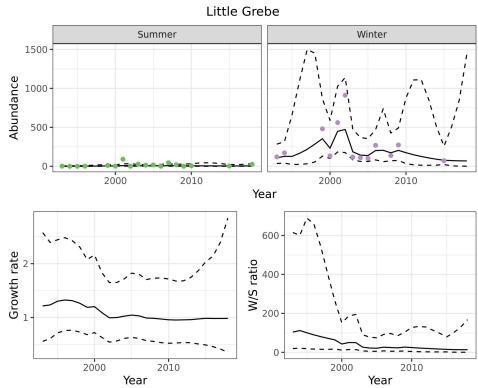
- Occupancy models for ABAP
- Bayesian framework
- Occupancy per pentad, year and species
- Derived indicators:
 - Area of occupancy
 - Extent occurrence
 - 0 ...



Species abundance

- State-space model for CWAC
- Bayesian framework
- Species- and site- specific models
- Aggregate results to obtain abundance at larger scales





BIRDIE systems overview Africa Bird Data server FIAO Data host server [Software System UCT] [Software System UCT] Data server Serves data (API) Hosts the various databases Hosts an Application Programming [JSON/HTTP] from which API draws its data **Data Sources Layer** Serves data (API) Other external servers [Data repositories] Serves data (API) BIRDIE server B [R/Python client] Analysis [Software system UCT] Runs models and stores model outputs **Analysis Layer** Serves data (API) [R/Python client] Google Earth Engine Support Serves data (FTP) Version control **BIRDIE server A** [Git] Data Mart layer [Software system RBINS] Presentation-Web Application & Map Viewer and runs pipeline modules GitHub **Application Layer** Serves data (API) Display data (dashboard) [RESTful API/JSON/HTTP] Legend Decisions Person **BIRDIE** user Software System [Person]

BIRDIE user interested in

BIRDIE server B overview

