frontiers

BIRDIE: A datapipeline to inform wetland and waterbird conservation at multiple scales

Francisco Cervantes [1,2*], Francis Strobbe [3], Yvan Stojanov [3], Michael Brooks [4], Vernon Visser [1], Nancy Job [2], Andrew Skowno [2], Res Altwegg [1]

[1] *Centre for Statistics in Ecology, the Environment and Conservation, University of Cape Town, Cape Town, South Africa*
[2] *South African National Biodiversity Institute, Kirstenbosch Research Centre, Cape Town, South Africa*
[3] *Royal Belgian Institute of Natural Sciences, Some Belgian official institution?, Brussels, Belgium*
[4] *FitzPatrick Institute of African Ornithology, University of Cape Town, Cape Town, South Africa*

Correspondence*:
Francisco Cervantes
f.cervantesperalta@gmail.com

ABSTRACT

1000 words max

We are collecting a lot of data

We need to process and analyze these data to make it useful for decision making

Fast and effective decision making is necessary to stop biodiversity loss and preserve ecosystem services

Wetlands deliver critical ecosystem services

Birds are convenient indicators of the state of wetlands

With the South African Biodiversity Data Pipeline for Wetlands and Waterbirds, we use two citizen science bird monitoring dataset to assess the state of waterbirds populations and its relationship with wetland conditions.

Acknowledging that decision making must occur at multiple scales, from site management to international coordination, we have developed a granular framework in which population indicators are estimated at small scales, and then these are aggregated to understand changes at broader scales.