

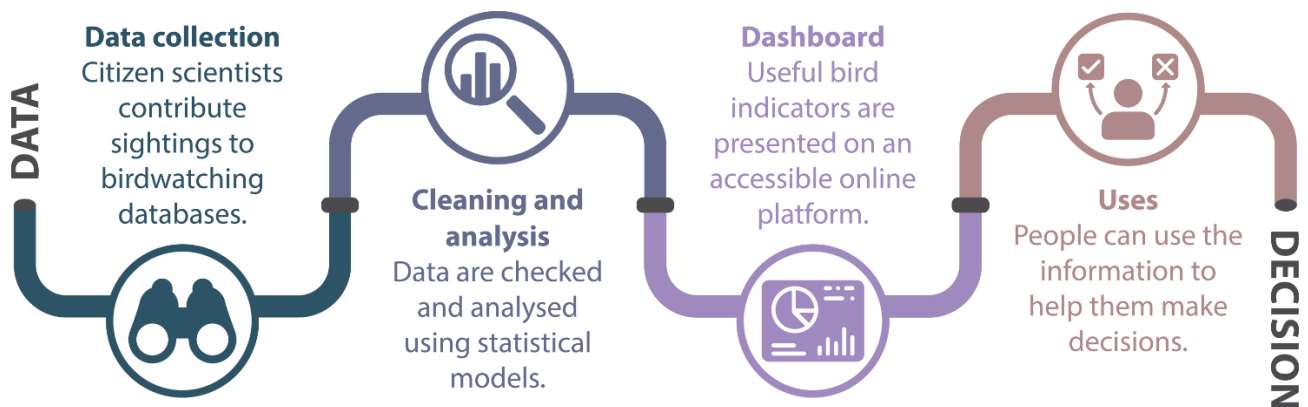


BIRDIE

for site managers

About BIRDIE

The **BIRDIE platform** gathers and interprets data about wetlands and waterbirds to provide information that is useful for decision making. It sources data from citizen science databases, which are checked and analysed using statistical models. An online dashboard allows users to access up-to-date indicators about bird distribution, abundance and richness at wetland sites. The information can be used for reporting, management, research and as a resource for birders.



<https://birdie.sanbi.org.za/>

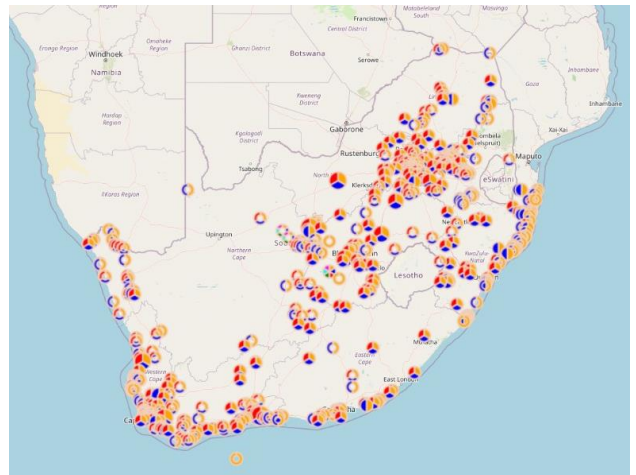




Wetland sites

The BIRDIE website contains information for more than 700 **wetland sites** across South Africa, including wetlands, dams, estuaries and other important areas for waterbirds. The site information is drawn from the Coordinated Waterbird Counts (CWAC). These are sites where waterbird numbers are monitored twice a year by professionals and volunteers. The information from CWAC is coupled with additional contextual information about the wetland.

Sites are managed by a variety of different entities, including provincial conservation agencies, local municipalities, companies, private landowners and local bird clubs. Managers have to make practical decisions about the conservation of these wetland sites. To make informed decisions, they need information about how waterbird populations and distributions are changing over time. This information can help them track the impacts of threats like pollution, but also how effective their management is over longer timeframes. Site managers are looking for easily accessible, well-structured and visually engaging information. This is what BIRDIE provides.



BIRDIE can help site managers make decisions about:



Recreation and usage



Invasive species control



Water flows



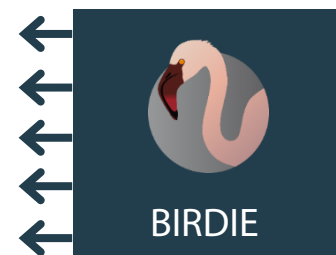
Special species



Pollution impacts



Education and awareness



BIRDIE tells us about wetland sites



Sites and Species
summaries and trends

Make your selection:

Please choose a site

On the [Site pages](#) it's possible to select a specific site from the drop-down list of more than 700 wetland sites, including the Ramsar sites in South Africa. On the site pages you will find:

Vital statistics: A summary for the site, including the number of citizen science visits, the total number of species, a list of threatened species and the Waterbird Conservation Value (see below) for the latest year.

Descriptions: General information about the site, like what province it's in, whether it's a Ramsar site, whether its protected, who manages it and an interactive map of the site. Further information about the wetland at the site, such as size, type, condition and hydroperiod.

Bird information: All the waterbird species observed at the site are listed in a table, with information about their habits and habitats. You can filter the table to show threatened species. The table also shows rate of change for bird populations – whether they are increasing or decreasing over a five and ten-year period.

What waterbird species are found at the site?

What threatened species are found at the site?

Summary: The summary table shows bird population numbers for the latest year.

BIRDIE tables are downloadable as .csv files.

BIRDIE shows how waterbird numbers are changing

Abundance is one of the most important bird indicators on BIRDIE. It draws its information directly from the waterbird counts from CWAC. Abundance is the number of individuals of a species present at each site. BIRDIE uses a statistical method called a state-space model to estimate bird abundance. You can view abundance for each bird species at a site on the Exploration map (see next page).



Population rate of change is calculated by comparing the abundance of a species at two different time points. This can show how much it has increased or decreased. BIRDIE calculates five-year and ten-year rates of change for each species at a site. This can help to show if an important species is doing well or if something needs to be done to prevent it declining. For instance, you would be able to find out how the numbers of White-faced Whistling Duck at Lake Sibaya have changed in the last ten years.

How are populations of species changing?

Waterbird Conservation Value is a new experimental indicator that measures how important a wetland is for the population of waterbirds. It takes account of the proportion of the populations of the different species that are present at a wetland site. A site can be important because it hosts a great proportion of a single species, or large proportions of many species. A large value means that the wetland is important for waterbird conservation. The value can change over time to show trends. We welcome feedback on this new indicator via the BIRDIE website.

How is the Waterbird Conservation Value for a site changing?

BIRDIE provides maps and graphs for waterbird indicators



The [Exploration Map](#) includes ways to explore, interact with and filter bird indicators and ancillary data layers on a map. All maps and graphs can be saved as image files.

Distribution: Where each species is found across South Africa, based on occurrence models.



Where are waterbird species found and which are endemic?

Abundance: The number of individuals of a species estimated to be present at each site. Selecting a site shows a graph of abundance trends over time.



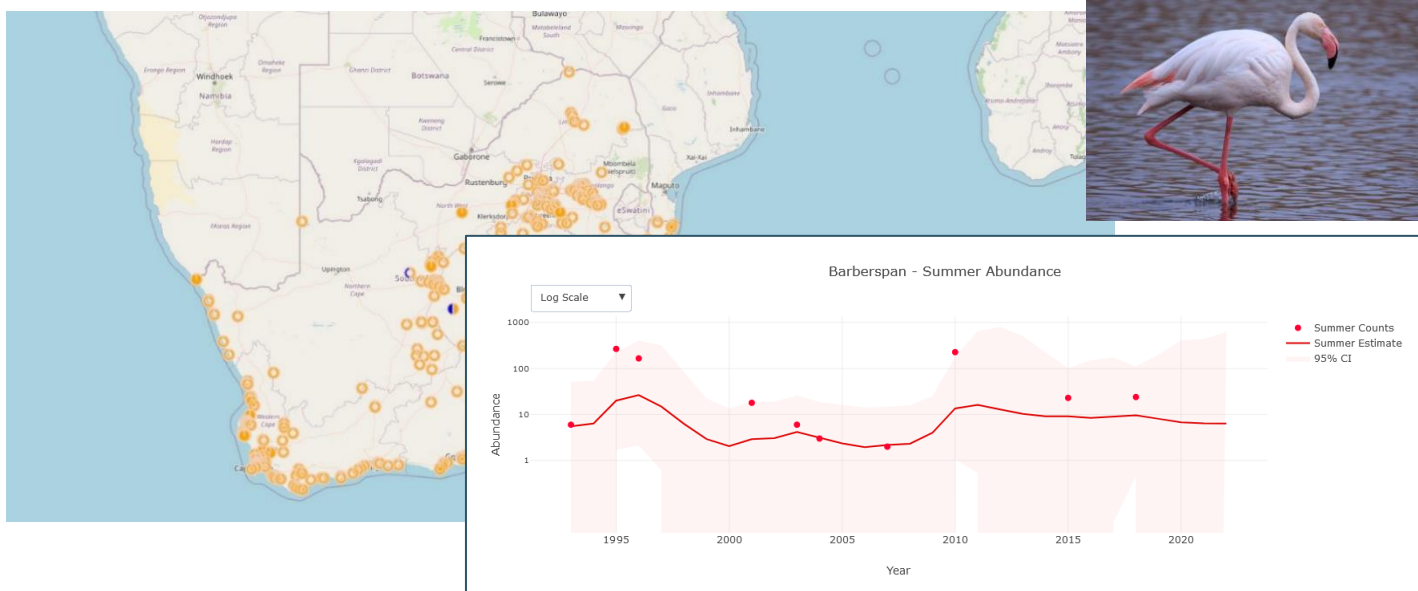
What is the abundance of bird species at wetland sites?

Species richness: The estimated number of waterbird species across South Africa.

Ancillary data: Additional data about temperatures, precipitation, water levels, vegetation greenness (NDVI) and more can help to provide clues for why population numbers are changing.



Why might bird numbers be changing?



Access underlying data from BIRDIE



You can use BIRDIE's [OpenAPI](#) to download the underlying data, perform your own analyses and build your own summaries.

For more information view the [FAQ](https://birdie.sanbi.org.za/) on the BIRDIE website: <https://birdie.sanbi.org.za/>

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