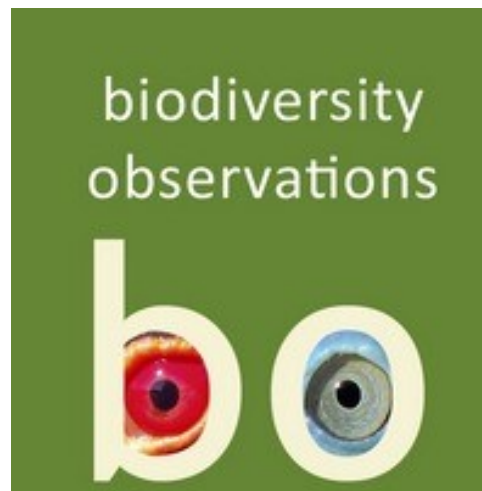


The open-access journal Biodiversity Observations: report for the period 2010–2022

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Journal Report

The open-access journal Biodiversity Observations: report for the period 2010–2022

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Between 2010 and 2022, the online journal Biodiversity Observations published 389 papers. In January 2023, the total number of downloads of these papers was 462,000. Between 2018 and 2022, 138 of the papers had been cited in Google Scholar, and had generated a total of 421 citations. The journal plans to continue publishing descriptive papers which report observations relating to biodiversity.

Mainstream scientific journals nowadays focus on publishing papers which report rigorous question-driven research. They give little space to descriptive papers; these are papers which, for example, report, a previously unknown hunting strategy of a predator, a new category of food for a bird, new breeding localities for a seabird, unusual predators, lists of species for a region, etc. It was not always like this. Box 1 contains two paragraphs from a 1936 paper in the journal *Ostrich* which describes the birds on the Vaal Dam, which was then nearing completion (Cable 1936).

This current approach of many journals has consequences. For example, the seventh edition of Roberts Birds of southern Africa (Hockey et al. 2005) had data gaps which were described in a document that runs to 123 pages (Maree 2005); it lists an alarming set of shortcomings in knowledge about the avifauna of the region. These gaps are mainly observational: descriptions of nests, eggs, etc.

If, for example, you are a fieldworker on Robben Island collecting data for rigorous research projects related to African Oystercatchers *Haematopus moquini* (e.g. Quintana et al. 2021) or African Penguins *Spheniscus demersus* (e.g. Campbell et al. 2019) you may observe an incubating Chukar Partridge *Alectoris chukar* flying out of the vegetation in front of you. Maree (2005) noted that there is no nest description for this species; the egg shape and egg colouration have not been described, and there are no measurements available for width, length and mass of Chukar Partridge eggs. You have an opportunity to fill one of the thousands of data gaps in Hockey et al. (2005), but the mainstream journals do not publish this genre of information.

Biodiversity Observations is an online journal which caters for these kinds of reports, not only for birds, but also for all other taxa. The journal published its first paper in 2010 (Leshoro et al. 2010) when it was known as Ornithological Observations. The first paper dealt with the observation of the first nest of feral Common Peacock *Pavo cristatus* on the continent of Africa. During one of his regular patrols, Robben Island Museum staff member, Mario Leshoro, had stumbled across the nest of a Common Peacock. The eggs were measured and weighed, and photographs taken of the nest itself (Leshoro et al. 2010). The paper was submitted to the journal *Ostrich* where it was summarily (and correctly) rejected because it was not the product of question-driven research. But this remains the only nest of the species found on Robben Island. Ornithological Observations provided the forum for this observation to be reported.

From 2010 to 2015, volumes 1 to 6, the journal published only observations related to birds. This narrow focus was removed in 2016, and the journal was renamed Biodiversity Observations.

Box 1. These are the last two paragraphs of a delightful “short note” written by John Cable and published in the seventh volume of Ostrich (Cable 1936). He described his observations of the waterbirds at the Vaal Dam, then nearing completion, and made an impassioned plea for the dam and surrounding area to become a bird sanctuary:

The Vaaldam vicinity, with its highveld pans and barrage between Vereeniging and Parys will offer grand harbourage for all wildfowl and as a large tree-planting scheme is being carried out in the neighbourhood of the Dam, every effort should be made to co-operate and make this the finest BIRD SANCTUARY in the world. We have the finest open-air Zoo in the world at Kruger National Park and let us therefore have also the finest Bird Park.

It is thought by some of us that too big a feature is made of the increased number of lions at Kruger Park. The public like to see them, but after all they are vermin and destroy uncountable numbers of Zebra and Wildebeeste. It may be of interest to record that the writer rode from Barberton to Shingwedzi on horseback in 1902, sleeping out the whole time and only heard one lion near Malelane on the return journey. Such a proceeding would be too risky with all these fierce beasts about nowadays.

He cleverly links the concept of the bird sanctuary to the concept of the animal sanctuary, the Kruger National Park, described as an open-air zoo. The second paragraph is about lions there. The observation about the abundance of lions in the Kruger National Park in 1902 should be cited in reference books about the mammals of Africa, but it is unlikely to be found in a paper titled the birds of Vaaldam. If this paper were submitted to Biodiversity Observations now, it would be split in two, one on waterbirds, and a very short note on lions. The description of them as “vermin” and “fierce beasts” would be paraphrased by the editors. It would be unthinkable for Ostrich, or any other mainstream journal, to publish this genre of paper in the 21st century. Nevertheless, it contains valuable observations.

When the journal started, online-only publications were a novelty. The pioneer online-only journal, PLOS One, had started publication in 2006, and was then little known. Until 2017, the papers in Biodiversity Observations were uploaded to the journal website using software developed in-house by Rene Navarro. In 2018, we transferred this operation to open access software, called Open Journal Systems (Willinsky 2005), which had been developed in Canada to challenge the monopoly held by commercial publishers with hefty article publication charges. The massive advantage of the transition was that it made papers in Biodiversity Observations, including all the early papers, searchable by systems such as Google Scholar. The benefits are described below.

The downside was that the online administrative process was far more complex than the system it replaced. This has radically slowed the rate of publication. Table 1 shows a general increase in papers published per year from 2010 (12 papers) to 2016 (103 papers). This was the period for which Arnold van der Westhuizen was chief editor, and we owe a great debt of gratitude to his productivity and persistence. Subsequently, we have not been able to maintain this pace (Table 1). Between 2010 and 2022 a total of 389 papers were published (Table 1).

The online counters for downloads were set to zero when Biodiversity Observations was transferred to Open Journal Systems, and the numbers of downloads given on the journal website refer to those made from 2018 onwards. However, the numbers of downloads of each paper for the in-house software period from 2010 to 2017 were archived, and these were added to the numbers on the new website (Table 1). The total number of downloads was 462,000 in January 2023; the download figures in Table 1 refer to the number of downloads of papers published in that year, and not the number of downloads in the year.

The big gain since the transfer to Open Journal Systems is that all papers in Biodiversity Observations (and Ornithology Observations) back to Volume 1 have been accessible to indexing systems such as [Google Scholar](#). This has made them searchable, and accessible to a

Table 1: Numbers of papers published online in each volume of Biodiversity Observations, 2010 to 2022, and the numbers of downloads of the papers in that volume.

Year	Volume	Papers	Downloads
2010	1	12	29 238
2011	2	21	35 651
2012	3	39	67 680
2013	4	33	65 988
2014	5	55	100 392
2015	6	31	32 927
2016	7	103	79 877
2017	8	53	34 450
2018	9	13	4 441
2019	10	14	3 698
2020	11	6	2 491
2022	12	10	5 211
Total		389	462 044

global audience. For example, if you search within Google Scholar for publications about the "Monotonous Lark", the paper by Derek Engelbrecht and Joe Grosel in volume 2 of Ornithological Observations is top of the list (Engelbrecht & Grosel 2011).

The Google Scholar database is constructed in such a way that it is possible to do a [query](#) which enables you to find all the papers which have cited each paper in Biodiversity Observations. The query lists papers published since 2018 and provides a count of the number. Because the transfer to Open Journal Systems was made in 2018, citations made prior to this date are not curated in Google Scholar. 138 papers (34.5% of the 389 published) have been cited at least once since 2018, and the total number of citations to these papers is 421.

Of the 11 papers with eight or more citations, four relate to the bird atlas project, SABAP1 (Underhill et al. 2017, Lee et al. 2022), including the most cited paper of all, which has 25 citations in Google Scholar (Table 2). One paper provides a summary of the dragonfly and damselfly project of the Virtual Museum (OdonataMAP), and one provides a summary of nest record card data in Namibia. In other words, six of the 11 most cited papers relate to citizen science projects.

The paper with 22 citations (Fincham & Lambrechts 2014) exemplifies the role that a journal like Biodiversity Observations can play. The authors did not set out to do a rigorous research project on the impact of Pied Crows *Corvus albus* on biodiversity in general, or even tortoises in particular. Instead, they reported on a single Pied Crow nest where, in one year, they observed that 315 tortoises had been killed to raise four fledglings. This paper had the impact of alerting researchers and conservationists of a potential problem, and has spawned several rigorous research projects. It turns out that Fincham & Lambrechts (2014) had discovered an unusual event, in which a single pair of Pied Crows had acquired this learned behaviour, and (fortunately) it was not widespread. If it had been a more widespread behaviour, this paper would then have alerted us to a severe problem in tortoise conservation. One of the 22 papers citing Fincham & Lambrechts (2014) is Stanford et al. (2020), which in turn has had 147 citations by January 2023. The total number of citations to papers which cited Fincham & Lambrechts (2014) was 365, which is an impressive “second phase” impact of their published observation.

During the period since 2020, a backlog of submissions has built up. Inevitably, and perhaps fortunately, the rate of submissions has also reduced. The slow publication rate of papers since 2018 has undoubtedly negatively impacted general awareness of Biodiversity Observations. We plan to address these issues in 2023.

We aim to continue publishing papers containing information about biodiversity in general. We accept submissions from anywhere in the world. This includes descriptions of distribution, behaviour, breeding, foraging, food, habitat, movement and measurements. It will also con-

sider for publication a variety of other interesting or relevant biodiversity information: reports on projects, summaries of conferences, guides to identification, annotated checklists for a site or region, specialist bibliographies, book reviews, ...

We aim to create a platform where both scientists and citizen scientists can publish appropriate papers. The papers will not be peer-reviewed or refereed, but the editorial committee will aim to ensure that high standards are maintained.

One of the questions we will ask of papers is “will this information be of use when the handbook for this taxon in this region is revised?” For bird papers in southern Africa, we will look for papers which fill the gaps listed by Maree (2005). It seems likely that most of the Biodiversity Observations papers which relate to birds contain snippets of information which will be cited in the eighth edition of Roberts, when that appears. Each paper, however small, and however unimportant the observation might appear, is a piece in the big jigsaw puzzle of understanding biodiversity.

A single observation can also inspire and fuel question-driven research. An example is the report about tortoise predation at a Pied Crow nest (Fincham & Lambrechts 2014); this important paper would (rightly) not have been published in a mainstream journal, because it is based on a sample of size one! But it triggered large-scale research projects.

There is a category of paper we avoid. We will try to reject papers which purport to be the products of “question-driven research”, but which were rejected by the mainstream journals, and were submitted to Biodiversity Observations as the option of last resort.

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Table 2: Papers in Biodiversity Observations with eight or more citations, as measured by Google Scholar, in January 2023. Weblinks to the papers are provided.

Paper Title	Citations
The fundamentals of the SABAP2 protocol	25
How many tortoises do a pair of Pied Crows <i>Corvus albus</i> need to kill to feed their chicks?	22
A survey of Cape Vulture breeding colonies in South Africa's northern provinces (Transvaal Region) - an update 2013	14
Preliminary summary of changes in bird distributions between the First and Second Southern African Bird Atlas Projects (SABAP1 and SABAP2)	13
Displaying changes in bird distributions between SABAP1 and SABAP2	11
Breeding data on the birds of Namibia: laying months, colony and clutch sizes and egg measurements	10
Pentad-scale distribution maps for bird atlas data	10
OdonataMAP: progress report on the atlas of the dragonflies and damselflies of Africa, 2010–2016	10
Endemic fynbos avifauna: comparative range declines as cause for concern	8
Fleeing by Whimbrel <i>Numenius phaeopus</i> in response to a recreational drone in Maputo Bay, Mozambique	8
Differences between Violet and Green Woodhoopoe mantle feathers	8

editorial board and others who have enabled the journal to make its contribution to documenting biodiversity. We especially want to celebrate the special role that Arnold van der Westhuizen played as founding editor of the journal.

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