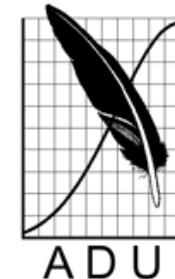




Ornithological Observations

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Ornithological Observations accepts papers containing faunistic information about birds. This includes descriptions of distribution, behaviour, breeding, foraging, food, movement, measurements, habitat and plumage. It will also consider for publication a variety of other interesting or relevant ornithological material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, and any other interesting or relevant material.

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PHOTOS OF WEAVER NESTS: PHOWN PROGRESS REPORT TO DECEMBER 2012

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The weavers (Ploceidae) are arguably the most interesting family of birds on the continent of Africa, from a variety of perspectives. Lack (1968) reviewed the ecological adaptations for breeding in some 10 000 bird species. In this broad review, he devoted four chapters to the Passerines, the order that contains about 50% of the world's birds. He recognized that the weavers were so exceptional and so interesting, that he devoted one of these four chapters to them: "the Ploceidae are discussed here in greater detail than any other family of birds".

Some key factors which make the Ploceidae an incredibly valuable resource for ornithological research in Africa are:

- There are 117 species, of which the majority, 112 species, are endemic to Africa and the Indian Ocean islands. Many weavers are widespread and abundant. The weavers include bishops and widows, queleas, buffalo weavers, sparrow weavers, social weavers, malimbés and fodies. Most species are relatively easy to study; fieldwork sites are therefore numerous, so that travel costs are not huge.
- Several species have pest status, raising food security issues. The Red-billed Quelea *Quelea quelea* is Africa's Feathered

Locust. The estimated population is 1 500 million birds, probably the most numerous land bird in the world (Mundy & Jarvis 1989).

- Several colonial-breeding species have taken to building nests on electricity transmission pylons, causing power outages, and raising energy security issues. .
- 19 species have threat status; seven species are listed as Endangered, six are Vulnerable, and the remainder are Near-threatened.
- There is enormous variability within the family: nest dispersion, pair-bond, diet and habitat. This facilitates comparative studies in evolutionary biology (Craig 2010).
 1. There are contrasts between breeding systems: monogamous and polygynous, solitary nesters and massive colonies,
 2. Most weaver species are granivorous but some are insectivorous,
 3. There are forest, savannah, grassland and montane species
 4. There are species in which males acquire extremely ornamental breeding plumage to species in which there is no breeding plumage at all.
 5. Within all these ecological contrasts, there are species which adopt intermediate positions.

Against this backdrop, **PHOtos of Weaver Nests (PHOWN)** started in June 2010 as a Virtual Museum project of the Animal Demography Unit (ADU). PHOWN has three main aims:



- to collect data on the breeding distribution of weavers (this is usually, but not always, similar to the bird's distribution),
- to collect data on the variation of colony sizes (at least in colonial species), and
- to collect ecological breeding data (e.g. other species roosting or breeding in weaver nests, nesting associations with other species, nest predation).

Other uses of PHOWN data include breeding densities if an area has been surveyed for all colonies or nests. The data can also be used for long term monitoring (and thus climate change studies) where participants monitor colonies on an annual basis.

PHOWN total records

The Virtual Museums are designed for participants to upload photos, but project managers also upload other records, e.g. specimen records. In PHOWN nest record card data has been uploaded (and more will be uploaded in the future). In this report, all PHOWN records are summarized, unless only photo records are specified.

The annual increase in records has been dramatic. In the six months of 2010 that the project was active, 438 records were accepted, then 1348 records in 2011 and 3418 in 2012.

PHOWN species

The species with the most records were Southern Masked Weaver, Cape Weaver and Village Weaver, (see Table 1 for the top 15 species).

62 of 117 species had photographic PHOWN records by the end of 2012, and an additional three species have records without photos. There are still many common weaver species without PHOWN records, so be the first to submit one of these!

Table 1: Top 15 species (most number of PHOWN records), 2010-2012

Species code	Name	n
803	Southern Masked Weaver <i>Ploceus velatus</i>	1510
799	Cape Weaver <i>Ploceus capensis</i>	877
797	Village Weaver <i>Ploceus cucullatus</i>	793
783	Sociable Weaver <i>Philetairus socius</i>	481
780	White-browed Sparrow-Weaver <i>Plocepasser mahali</i>	254
808	Southern Red Bishop <i>Euplectes orix</i>	196
791	Spectacled Weaver <i>Ploceus ocularis</i>	105
800	Eastern Golden Weaver <i>Ploceus subaureus</i>	104
779	Red-billed Buffalo-Weaver <i>Bubalornis niger</i>	88
804	Thick-billed Weaver <i>Amblyospiza albifrons</i>	88
792	Lesser Masked Weaver <i>Ploceus intermedius</i>	77
793	Red-headed Weaver <i>Anaplectes rubriceps</i>	74
796	Chestnut Weaver <i>Ploceus rubiginosus</i>	74
801	Holub's Golden Weaver <i>Ploceus xanthops</i>	49
790	Dark-backed Weaver <i>Ploceus bicolor</i>	40

PHOWN participants

206 participants have contributed photo records to PHOWN to the end of 2012. Nest Record Card observers are not included in this section. The top 20 are listed in Table 2.

Most records were submitted by Pieter Cronje, a human rights lawyer, with a total of 1540 records submitted to the end of 2012. The bulk of his data comes from surveying weavers in eastern Pretoria, particularly Southern Masked Weavers, and the area north of Durban (mostly Village Weavers).



Table 2: Top 20 participants in PHOWN, 2010-2012

Rank	Participant	n
1	P Cronje	1540
2	HD Oschadleus	1246
3	A Zaloumis	182
4	RL Thomson	159
5	AM Archer	154
6	A van Vuuren, S Swarts	150
7	R Covas	112
8	RJ Nuttall	106
9	C Wilson	70
10	C Reiman	65
11	SJ Schultz, B Schultz	63
12	M James	56
13	D de Swardt	54
14	DM Harebottle	51
15	JA Heymans	48
16	D Brown	47
17	H van Zijl, G van Zijl	46
18	R Kadis R, A Kadis	39
19	D Jansen	39
20	L Steenberg	37

PHOWN regions

There are PHOWN records from 28 countries (Fig. 1); the top 10 are listed in Table 3. The natural range of weavers covers about 60 countries, in sub-Saharan Africa, southern Asia and the Indian Ocean islands. Most PHOWN records were from South Africa and Namibia. Species richness map for South Africa from the Virtual Museum web shows hot spots from Mpumulanga, Gauteng, KwaZulu-Natal coast and Cape Town (Fig. 2).

Table 3: Top 10 countries with PHOWN records, 2010-2012

Rank	Country	n
1	South Africa	4611
2	Namibia	236
3	Angola	155
4	Kenya	150
5	Tanzania	47
6	Ethiopia	33
7	Zimbabwe	28
8	Zambia	20
9	Mozambique	17
10	Sierra Leone	17



Fig 1 – Distribution of weaver breeding records, PHOWN 2010-2012

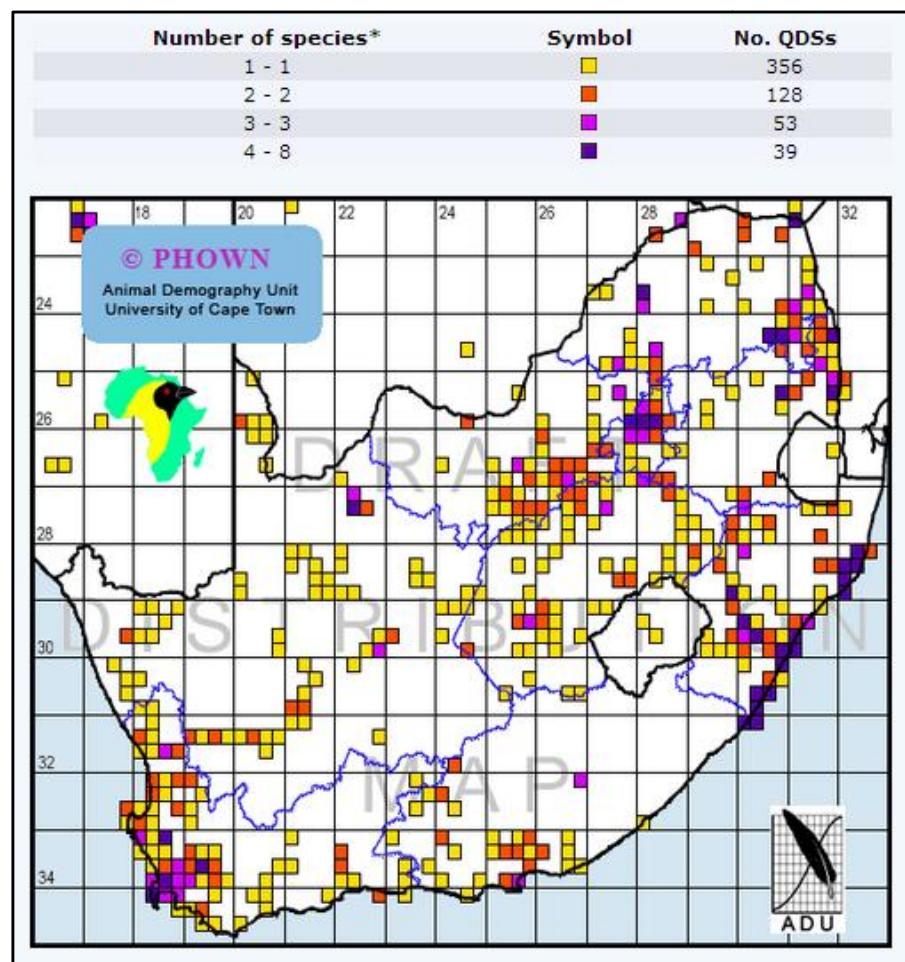


Fig 2 – Species richness, PHOWN 2010-2012

Travel for PHOWN

In 2012 funding was received for WRAP (Weaver Research Africa Project). This funding was largely to promote PHOWN. Local talks and workshops on PHOWN were presented in KwaZulu-Natal, the Eastern Cape and Cape Town. Internationally, talks were presented

at the Namibian Bird Club 50th anniversary, and workshops were held in Kenya. At the 13th Pan-African Ornithological Congress in Arusha, a round table discussion, a plenary and a weaver symposium were presented. A successful one-day conference on weavers was held on 26 January 2013 (forming part of the 2012 funded events). Details of these events are shown in Appendix 1.

Weaver Wednesday and listserver

The ADU started a daily series on biodiversity news items, including Weaver Wednesday which sees a different weaver species summarized weekly. Initially a weaver species was chosen from each of the 16 genera. During 2012, 28 weaver species were covered, with each species account having a map, some photos of the birds and nests, and text about the bird and its breeding.

During 2012 a listserver for a weaver interest group was set up and there are over 200 subscribed people, largely PHOWN participants.

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Acknowledgements

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- Mundy PJ, Jarvis MJF (eds).** 1989. Africa's feathered locust. Harare: Baobab Books.



Appendix 1: Summary of events related to the PERC project attended during 2012 (and January 2013). The first line shows the date and event, the following line shows the locality, followed by a web link (if available), and the final line shows the sponsor

Date	Event
23-27 Jan	Citizen Science: Building an Early Warning System for Biodiversity - several talks University of Cape Town
6 Feb	BirdLife Zululand - talk on PHOWN Richard's Bay http://weavers.adu.org.za/trip2012kz.php funded by PERC
11 Feb	ADU 20th anniversary - talk on PHOWN Pietermaritzburg http://weavers.adu.org.za/trip2012kz.php funded by PERC
16 Feb	Launch of WRAP – several talks University of Cape Town http://weavers.adu.org.za/newstable.php?id=182 http://weavers.adu.org.za/newstable.php?id=188 funded by PERC
25 Feb	West Coast Bird Club - talk on PHOWN Hopefield http://weavers.adu.org.za/newstable.php?id=192 funded by PERC and West Coast Bird Club
12 Mar	BirdLife Plettenberg Bay - talk on PHOWN Plettenberg Bay funded by PERC
15-16 Mar	Frontiers in South African Ornithology - talk on PHOWN results Port Elizabeth funded by PERC
30 Apr-1 May	Namibia Bird Club 50th anniversary - talk on PHOWN Windhoek, Namibia http://weavers.adu.org.za/trip2012na.php funded by Namibia Bird Club

28-30 May	PHOWN 3 day workshop on weavers & PHOWN Nairobi, Kenya http://weavers.adu.org.za/trip2012ke.php funded by PERC
2 June	PHOWN 1 day workshop on weavers & PHOWN Watamu, Kenya http://weavers.adu.org.za/trip2012ke.php funded by PERC
14-21 Oct	13th Pan-African Ornithological Congress – plenary, symposium & workshop Arusha, Tanzania http://weavers.adu.org.za/trip2012tz.php funded by PERC
26 Jan 2013	"Weavers for Africa" Conference - many talks Intaka Island, Cape Town http://weavers.adu.org.za/conf.php funded by PERC



Southern Masked Weaver male at nest
(from PHOWN record 1788).