

Update on GPS-tagged Black Harriers as of 1 DECEMBER 2023

Our Black Harrier Project is gaining momentum and we are excited to share the latest tracking news with you. With another three birds tagged in the Overberg this year (so far!), we have now tagged a total of 14 renosterveld-breeding Black Harriers. We have also been able to assist with providing tags to support Black Harrier research outside of the Overberg and to this end, we have shared some tags with our partner and harrier guru, Dr Rob Simmons. This update, however, focuses (mostly) on the Overberg birds that we have been tagging since our first bird in 2020.

So, here are some of the facts summarised:

- TOTAL number of birds tagged: 14 (10 males, 4 females)
- TOTAL number of birds that have died: 3 (males)
- CAUSES of death: Wind turbine collision, wheat-cutter (harvester) and an aerial predator (raptor)
- Other causes of lost birds: 2x faulty tags (both after providing two years of data)
- Total number of active tags currently: 9
- Furthest distance and speed undertaken by a Black Harrier in a single day: A female tagged outside of the Overberg in the Jeffrey's Bay area has been on a major walk about and in October broke the land-speed record for a Black Harrier on a journey from Piketberg (W Cape) to Kokstad (Eastern Cape). She travelled the 1140 km journey in 3 days, and her tracker showed during the central section she covered 525km of central Karoo in 12 hours of *continuous* flying. Literally never stopping once she was underway. Clearly aided by a following wind, she averaged 40km/h for the entire journey and her unit showed on two occasions she clocked 80km/h! We checked her tracker, that gives altitude, as she flew over Hanover and she ~ 580m above the ground. This is fortunately above the height of obstacles that are known to kill harriers such as powerlines and wind turbines. But we need to do a proper analysis of all flight heights to better understand the risks.



Travelling harriers

After most of the Black Harriers tagged in 2020 and 2021 didn't leave the Overberg through winter and stayed on their breeding grounds the following spring, things changed in 2023. Almost all the birds moved eastwards: to the Free State, the western border of Lesotho and the Eastern Cape. When it was time to think about breeding again, each individual (of the birds that are still alive with working tags) did something completely different: one stayed in the Eastern Cape to breed, three returned to the Western Cape but two of these are breeding in the Robertson area, and one has shacked up in a renosterveld patch near Riversdale, while only two of our old faithful males returned to their same breeding sites to breed again this year.

One male, Ames, undertook the most incredible and surprising journey of all: After breeding in the Overberg in 2022, he overwintered west of Cathcart, Eastern Cape. However, as spring approached, he decided that he would again make a major move. He started travelling west, across the Karoo, in early August 2023. This journey was remarkable not only for its speed, but the fact that he motored north to the Richtersveld and was clearly setting up a territory in the mountains there to breed. This would have been a first record for Black Harriers breeding in the mountains just south of the Orange River, but fate took a hand and he was killed by an unknown predator while moving over the desert plains (just after substantial rains). When his tag was collected just outside Kuboes by Nature Conservation officials, the ground was littered with his feathers and all evidence suggests an aerial predator took him out. This was bizarre because our colleague Dr Meg Murgatroyd, also tracking Black Harriers had, the week before reported a Black Sparrowhawk depredating one of her tracked birds (carcass also found, on the south coast). This was a great and unexpected loss. However, without these tags we would never have known that some adults meet their fate in this way.

Each tag is teaching us so much about these birds and all this information will ultimately contribute to the development of a conservation and management plan for the species. These magnificent birds never stop to amaze us. We are collecting so much incredible information from the GPS tags, which are well worth every penny that our wonderful supporters have contributed. We thank you again for supporting this important research and will provide more updates again in the new year.



Summary of tagged birds to date

Name / Tag	Date	Last seen / Fate of bird	Tracking maps
144	tagged		acimigaps
Goereesoe male #47	26 Nov 2020	This male never left the Overberg over the two years that his tag was functional. Last signal from 27 th December 2022, No carcass found; suspect faulty tag. CONFIRMED! Bird with tag (not working) seen breeding close to where this bird bred last year in October 2023.	
Goereesoe male #48	26 Nov 2020	After breeding in the Overberg in 2020, he spent time at De Hoop NR and we then lost his signal for about 10 months. On 5 th November 2021, he was killed through a collision with a wind turbine at Excelsior Wind Energy Facility. His tracker was still attached but not functioning.	
Goereesoe female #10	1 Dec 2021	Left the Overberg after breeding in 2021 and spent time overwintering north of Oudsthoorn and then north of Mossel Bay. She then returned to the Overberg, but her signal died on 3 rd June 2022: We suspect this is due to the battery dying during long periods of no sun while she incubated. She was confirmed alive inspiring 2022 (nest found and tag clearly visible on her back, seen much later in the breeding season again (October); faulty tag.	

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Goereesoe male #88	26 Sep 2021	After breeding, and staying in, the Overberg since 2021, he moved to north of Vrede, Free State to overwinter in 2023. Returned to Goereesoe to breed in spring 2023.	LC:100
Haarwegskloof male #09	26 Oct 2021	Didn't leave his breeding grounds from 2021 – early 2023 when he left the Overberg for the Eastern Cape, overwintering near Stutterheim (Eastern Cape), and in all likelihood breeding in the region too.	
Hartebeesterivier male	26 Oct 2021	5 th November 2021, killed by wheat-cutter / harvester, where he was roosting in a wheatfield, less than 2km from nest. His chicks had luckily just fledged and the female was able to take care of them.	Europaga est

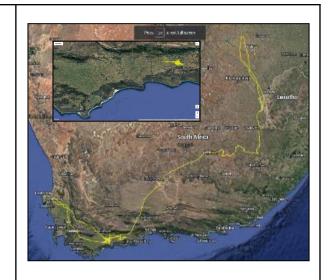
Tarentaal male	27 Sep	After breeding in, and staying in, the	
#08	2021	Overberg through 2021 and 2022, in 2023, he overwintered between	
		Sterkfontein Dam and Vrede (Free	
		State).	
		Currently (2023) breeding in the	
		Robertson area, Klein Karoo.	Sub illina
			Extractional Contraction and resident before East under Justice Science
Tarentaal male	4 Oct	After breeding in the Overberg in 2022,	
Ames	2022	he overwintered west of Cathcart,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(Named by Alma &		Eastern Cape. Then, he travelled up to	
Eric, who donated		southern Namibia and was killed by an	
the tag)		aerial predator near Springbok.	
Tarentaal female	4 Oct	After breeding in the Overberg in 2022,	
Mesa	2022	she overwintered in Molteno, Eastern	
(named by Alma & Eric, who donated		Cape; Returned to the Western Cape in	
the tag)		2023 for spring, to breed near Robertson in the Klein Karoo.	
the tagy		Robertson in the kieln karoo.	
			Sarah Und

Tarentaal male Chuana (named by Callan Cohen, who donated the tag)

4 Oct 2022

After breeding in the Overberg, he overwintered around Boesmanskop, Free State near Lesotho border. Now breeding in a renosterveld patch near Riversdale.





Goereesoe female Jules (named after Jules Tolboom, harrier enthusiast

associated with the Dutch Montagu's Harrier Foundation, who donated the tag)

10 Nov 2023



This female, recently caught (Nov 2023), and held here by

Nande, is a breeding bird, with three 2/3 grown young, and yet to start foraging.



Goereesoe male Kwezi II (named by the

Inkwazi Bird Club, KZN; the name means "star"

10 Nov 2023



This female, caught mid-Nov 2023 and held by Odette, is a breeding bird, with nestlings still in the nest, and not yet foraging.

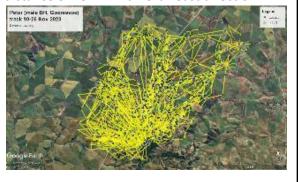
Goereesoe male Peter

(named by the Cape Bird Club (who donated the tag) in honour of the great raptor biologist Peter Steyn)

11 Nov 2023



Peter was one of 6 Black Harriers mobbing the stuffed owl near his nest. His foraging range takes him north of Goeressoe with a maximum distance of 13 km in a north-east direction



Tarentaal female Molly (named after Odette's 5 year old daughter, Molly, who supervised proceedings) 12 Nov 2023



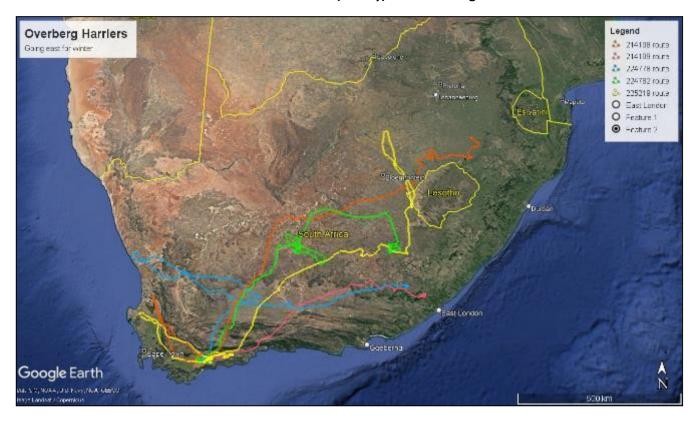


Below: Juvenile Black Harriers, soon after fledging





Tracks of birds that headed east (mostly) once breeding was over....



Above: Routes of adults harriers that headed out of their breeding areas once breeding was over in early 2023:

108 = Tarentaal male, 109 = Haarwegskloof make, 778 = Ames, 782 = Mesa, 219 = Chuana

