

# 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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## ARTIFICIAL NEST SITES USED BY SOUTHERN BALD IBIS *GERONTICUS CALVUS*

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The Southern Bald Ibis *Geronticus calvus* is listed as **Vulnerable** in the South African Red Data Book of Birds due to its contracted distribution and small population size (Barnes 2000). Over the past few years BirdLife South Africa has been surveying Bald Ibis breeding sites to assess changes in numbers and distribution of the species. Southern Bald Ibis generally nest on cliff ledges, mainly over water.

Some pairs, however, are taking advantage of artificial nest sites. These are known to include ledges in disused mine-shafts and abandoned quarries (Tarboton 2011, W. Tarboton unpublished notes, CLH personal observations, and reports from the general public). For example, Southern Bald Ibises have colonised old mine shafts in the vicinity of Belfast and Badplaas in Mpumalanga and Utrecht in KwaZulu-Natal. Old quarries, with suitable ledges, are used throughout their range. Water collects at the base of the shafts/quarries, and adds to the attraction of these sites, many of which have been used for decades.

This note reports on Southern Bald Ibises breeding at artificial sites which are characterised by significant levels of human disturbance.



**Fig 1** – Active dolerite quarry near Harrismith, Free State, South Africa, where Southern Bald Ibis nest, impervious to noise  
(Photo: Jane Henderson).

These are two active quarries, a water-supply dam and an office block.

Two active quarries, one granite quarry near Belfast and a dolerite gravel quarry near Harrismith, have been used by a few pairs of ibises for several years. The latter quarry had a single pair nesting on a ledge from around 2005 to 2009. In 2010 this pair was joined by an additional three nesting pairs, which used the opposite side of the quarry. The birds seem impervious to the heavy machinery and loud noise of scooping and crushing rock that continues around them. The



**Fig 2** – An active granite quarry near Belfast, Mpumalanga, South Africa where several pairs of Southern Bald Ibis nest (CLH)

quarry manager does not blast when the birds are sitting on nests, but the rest of the quarrying activities continue with little effect on the nesting birds. There are pools of collected water in parts of the large quarry but none directly under the chosen ledges (Fig 1).

In the granite quarry at Belfast, Southern Bald Ibises have been nesting since about 2008. Three to four pairs nest there. They are using an area adjacent to the main working pit, but there is still much noise and human activity. There is no water in this quarry (Fig 2).



**Fig 3** – Southern Bald Ibis nesting on ledges on the Westoe Dam near Amsterdam, Mpumalanga, South Africa (Photo: Eva von Fintel).

Quarry and mine-shaft ledges, although man-made, are not too different from natural ledges. Some Bald Ibis, however, are making use of completely artificial ledges.

In 2008, Eva von Fintel and family noticed Southern Bald Ibis breeding on a dam wall near the town of Amsterdam in Mpumalanga, South Africa (Figures 3 & 4). The ibises were using the ledges in the middle of the two release gates. Two sets of heavy metal gates comprise the release area of the dam. The ledges are in the middle of each set of gates, on either side of the openings (Figure 5). The ibis must have been using this site prior to 2008 judging from the extensive whitewash covering the ledges. The entire section around each opening is white. From five to seven nests have been recorded on each gate of the dam. In 2011, during road-works, a stop-and-go traffic control system was set up just below the wall. The control



**Fig 4** – Southern Bald Ibis nests (with chicks) on the Westoe Dam wall. Five to seven nests have been recorded on the two similar portions of the release-gates. This is the right-hand site (Photo: Eva von Fintel).



**Fig 5** – Position of the artificial ledges being used on Westoe Dam. Both the left and right hand sides of the release gates are used where a flat surface is available on the metal wall. The white-wash is extensive, indicating the ledges have been used for a number of years. There is an additional roosting site on the left below the observation room (CLH).

system was manned around the clock, with constant radio communication and human and traffic disturbance. The ibis did not breed there that year. The road-works are now completed, in that section, and we expect that the birds will return to breed there again in 2012.

In 2011 a pair of Southern Bald Ibis was recorded nesting at the ArcelorMittal office-block, north east of Newcastle by Danie de Wet (Figure 6). This north-facing isolated office block is the administrative building forming part of the ArcelorMittal steelworks. At the end of August 2011 Danie noticed a pair taking nesting material to a ledge on the seventh floor on the south side of the eight-story building. He took one photograph down from the roof of the building (Figure 7) but it was too dangerous to make observations from there. The nest could be observed from inside the building, but was partially obscured by the louvre blinds covering the outside of that story of the building (Figure 8). Three eggs were laid but only one hatched. One egg disappeared before the chick hatched, the other a few days after. The chick fledged, successfully, from the building in November 2011.

Rina Pretorius managed to get a security camera mounted over the nest, poking out between the blinds. Footage of the 3-week old chick was obtained. If the Bald Ibis pair chooses the same site in the following years, we will be able to film the sequence from nest building to chick fledging.

The ability to adapt to artificial nest sites increases survival opportunities for the species. Apart from using quarries and mine-shafts, a few Southern Bald Ibis pairs have taken to nesting in trees (Tarboton 2011). However, tree nesting is an isolated phenomenon.



**Fig 6** – Position of the Southern Bald Ibis nest site on the ArcelorMittal building near Newcastle, KwaZulu-Natal, South Africa (Photo: Danie de Wet).



**Fig 7** – Southern Bald Ibis nest on the ArcelorMittal building near Newcastle (Photo: Danie de Wet).

In the case of the active dolerite quarry in Harrismith, a single nesting pair persisted for several years before being joined by additional pairs. It is possible that one or more members of the additional pairs were offspring of the pair that founded the colony. This would explain the delay of at least two years before additional pairs were recruited. The dam wall nesters seem to have settled into their site but we do not know the progression of establishment. If the high-rise pair returns to breed in 2012, perhaps slow colonisation of the building's seventh floor ledge will take place. Understanding human occupants will be necessary for this to occur. Unfortunately, Southern Bald Ibis are not the most discrete or hygienic of nesters.



**Fig 8** – ArcelorMittal building nest with Southern Bald Ibis chick, viewed through the louvre blinds (Photo: Danie de Wet).

### **Acknowledgements**

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