a confusion of buzzards

Mystery surrounds buzzards breeding in the Western Cape

TEXT BY ODETTE CURTIS & ANN KOESLAG

NICO MYBURGH

TREVOR HARDAKER (2)

Top and middle *Typically plumaged Forest Buzzards.*

Above *A clearly recognisable Steppe Buzzard.*

What is the first thing that comes to mind when you come across a breeding buzzard in a stand of trees? You think 'Forest Buzzard', right? Most of us don't even bother to take a second look at the birds, because if they are breeding or even just sitting in a forest, we assume they are Forest Buzzards.

Or are they? Distinguishing the different buzzard species is not easy, mostly because of the enormous variation in plumage that is so characteristic of the buzzard group. Therefore most of us have adopted the assumption that if it's breeding, it must be a Forest Buzzard and if it's sitting on a pole in a wheatfield, it's a Steppe Buzzard.

Forest Buzzards *Buteo trizonatus* are generally whiter on the underparts than Steppe Buzzards *B. vulpinus*, with some rusty-brown mottling, but no barring, except on the thighs. Unless soaring, they are generally found within and on the edges of forests. Steppe Buzzards are very variable in plumage characteristics, with varying degrees of blotching, streaking and barring on their underparts, and often with a pale band across the centre of the breast. In flight, the two species are very difficult to separate and often this can only be achieved by comparing their proportions and the type of streaking on the underparts. According to the fieldguides, Steppe Buzzards are also usually silent in Africa.

In 2002, Ann Koeslag found a pair of 'strange' buzzards breeding in the pine plantations of Tokai in the Cape Peninsula and we agreed that there was very little chance that they were Forest Buzzards: one was a solid, dark chocolate-brown, the other was a solid rufous in colour, and both lacked white blotching. This was hardly the typical white, blotchy appearance of a Forest Buzzard, and was in fact far more typical of a Steppe Buzzard – a bird which supposedly does not breed in the Southern Hemisphere. The pair raised a single chick in their pine-tree nest in 2002. The following year, the 'mystery' birds used the same nest, but this time both adults were solid rufous in colour. They raised two chicks. In 2005, a pair of unknown buzzards moved into a nearby stand of trees and built a nest in a large eucalypt, where they raised a single chick. On this occasion, one of the birds was again solid rufous, while the second had the paler, blotchy appearance typical of a Forest Buzzard.

We then suspected that the two apparently different species could be hybridising, but was that possible? According to the most recent genetic studies of buteos (buzzards), some species (for example, Forest and Steppe buzzards) have only recently diverged from one another, so, in terms of their evolutionary history, they are very closely related. There is therefore a fair probability that the two could hybridise, given the right circumstances (such as breeding in the same habitats in the same area).

In 2005, Rob Martin reported a 'strange' pair of buzzards breeding in a mixed oak wood in Grabouw in the Overberg region of the Western Cape, where they raised one chick (in a blackwood tree). The birds were very similar in appearance to the Peninsula buzzards, and both had solid rufous chests. In 2006, a similar-looking pair attempted to breed in the same general area (in a pine this time), but this attempt failed when their nest was blown out of the tree during a storm. Rob recalls watching dark-coloured buzzards displaying more than 20 years ago, but as it was common belief that only Forest Buzzards bred in the region, he dismissed any suspicion that they could be something else. And, while Steppe Buzzards are supposedly silent in Africa, the 'mystery buzzards' call regularly during aerial and pursuit displays.

The breeding buzzard population in the Cape Peninsula has been on the increase during the past few years. We are now aware of close to 10 pairs of ▷

JESSIE WALTON (2)

The 'mystery buzzards' from Grabouw (male, above and female, right), photographed in 2005.

Left *The fledged juvenile buzzard seen in Tokai, 2002.*

Below *The adult rufous buzzard on the nest in Tokai, 2003.*

ANN KOESLAG (2)

ROB SIMMONS

Throwing a spanner in the works... the rufous 'mystery buzzard' nesting on a cliff above Kirstenbosch, 2006.

plantation-nesting buzzards there and, of these pairs, at least 40 per cent contain either one or two 'mystery' buzzards.

Although we suspect the birds are Steppe Buzzards, not all of them are typical Steppes, either. Most of them are solid rufous or chocolate-brown in colour – not the classic 'bibbed' Steppe Buzzards one sees on roadsides. Thus, for the moment, we continue to call them 'mystery' buzzards.

To add to the confusion, in 2006 a pair of 'mystery buzzards' was found breeding on a cliff above Kirstenbosch National Botanical Gardens, just outside Cape Town. This was a little disconcerting, as Steppe Buzzards do not characteristically breed on cliffs within their 'normal' breeding range. And these birds were breeding on a cliff, above hundreds of hectares of apparently perfectly viable forest, begging the question 'why'? The migratory Common Buzzard *B. buteo* and Long-legged Buzzard *B. rufinus* are much more likely to breed on cliffs. But these species do not (as far as we are aware) migrate as far south as South Africa, let alone breed here. Plus, the mystery birds do not have the typical appearance of either of these species. At this stage, we cannot be certain what these birds are.

This can only be determined through genetic material; we have taken blood samples from a single brood of chicks, but are still awaiting the results. Whatever they are, we are increasingly certain that they are not Forest Buzzards, making it very likely that we are dealing with a Northern Hemisphere species. If they are Steppe or other Palearctic-breeding buzzards, it wouldn't be the first time that 'Northern Hemisphere' birds have bred in the deep south. In the Western Cape, there are breeding populations of White Storks *Ciconia ciconia*, Booted Eagles *Aquila pennatus*, European Bee-eaters *Merops apiaster* and Leach's Storm-Petrels *Oceanodroma leucorhoa*. In addition, there have been breeding attempts by Common House-Martins *Delichon urbicum* and almost certainly by Sandwich Terns *Sterna sandvicensis*. Whether all these populations started breeding here for the same reason is unknown: European Bee-eaters have been here for hundreds of years, whereas Leach's Storm-Petrels were only discovered breeding in the 1990s, and may already be dying out here as a breeding species. The difference between these species and our mystery buzzards is that their identification is confirmed beyond doubt!

We hope to confirm the identity of these buzzards in the not-too-distant future through a genetic study. We would also like to know what proportion of our breeding buzzard population is in fact made up of 'mystery' or hybrid pairs. Do the birds overwinter here? And, if so, is this a long-established phenomenon (as Rob Martin's observations may suggest) or a more recent one? What food resources are the birds using? Do they differ from those used by Forest Buzzards and should we expect an increase in the incidence of breeding 'mystery' buzzards? At a more fundamental level, why do some birds change their migration pattern and breeding location? Is it a response to habitat change, climate change, both of these factors combined, or other factors? And if there is hybridisation, what are the implications of this for the near-endemic Forest Buzzard population? These are all questions that will take many seasons of fieldwork and much collaboration to unravel. □

If you have any information or photographs that could contribute to the buzzard story, or if you would like to get involved, please contact Odette Curtis on *ocurtis@botzoo.uct.ac.za* or fax (+27-21) 650 3295.

ACKNOWLEDGEMENTS

Thanks to Bill Clark, Phil Hockey, Callan Cohen and Meidad Goren for their comments on pictures/sightings of the birds; to Jessie Walton, André du Toit, and Peter and Barbara Knox-Shaw for their observations and access to land; and to Rob Martin and Rob Simmons for their valuable contributions to the development of this study.