

SEPARATING ALBATROSSES

Tristan or Wandering?

Text and photographs by Peter Ryan



A Tristan Albatross fledgling on Inaccessible Island. Note the paler, greyer plumage than that of a Wandering Albatross of the same age.

Two types of Wandering Albatross occur off southern Africa: the larger, southern-breeding *Diomedea [e.] exulans* and the smaller *D. [e.] dabbenena* from Tristan and Gough. They are now treated as separate species by most authorities, but how easy is it in fact to separate the two species in the field? ▷



A nine-year-old Tristan Albatross (presumed female) breeding at Gough Island (far left) appears similar to a dark, five-year-old non-breeding Wandering Albatross on Marion Island (centre), and is considerably darker than another five-year-old non-breeding female Wanderer (left).

Albatross taxonomy has undergone some radical changes in the last five years, expanding from 14 species to as many as 24 species in four genera (see *Africa – Birds & Birding* 2(1): 35). The great albatrosses have been most affected, with seven species in the complex:

Wandering Albatross *Diomedea [exulans] exulans*. 14 000 pairs breed at South Georgia, Marion and Prince Edward, Crozet, Kerguelen and Macquarie islands; ranges throughout the Southern Ocean. This species is also sometimes referred to as the Snowy Albatross *D. [e.] chionoptera*.

Tristan Albatross *Diomedea [e.] dabbenena*. 2 500 pairs at Gough and Inaccessible islands, and Tristan da Cunha; ranges through the South Atlantic, and at least occasionally reaches Australia.

Antipodean Albatross *Diomedea [e.] antipoden-*

sis. 8 500 pairs at Antipodes and Campbell islands, New Zealand; ranges through the South Pacific.

Gibson's Albatross *Diomedea [e.] gibsoni*. 10 000 pairs at Auckland Islands (south of New Zealand); ranges through the South Pacific.

Amsterdam Albatross *Diomedea amsterdamensis*. 20 pairs at Amsterdam Island; range presumably South Indian Ocean.

Southern Royal Albatross *Diomedea [epomophora] epomophora*. 13 000 pairs at Campbell and Auckland islands and hybridises with Northern Royals at Taiaroa Head, Otago, New Zealand; ranges primarily through the South Pacific, but some throughout the Southern Ocean.

Northern Royal Albatross *Diomedea [e.] sanfordi*. 8 600 pairs at Chatham Island and Taiaroa Head; range as for Southern Royal Albatross.

Arguments about the validity of these splits are ongoing, but this shouldn't deter birders from attempting to identify the great albatrosses as far as possible, if only to provide additional information about the ranges of these birds.

Field criteria for separating the two Royal Albatrosses are well known (summarised in Harrison 1983), and both species occur off southern Africa. The Northern Royal Albatross is a rare but still regular visitor to the continental shelf. The Southern Royal is rarer, with fewer than five southern African records, but recent observations suggest that it is frequent in the Roaring Forties south of Africa.

Recoveries of banded birds and measurements of dead birds confirm that both nominate Wandering (*exulans*) and Tristan (*dabbenena*) albatrosses visit

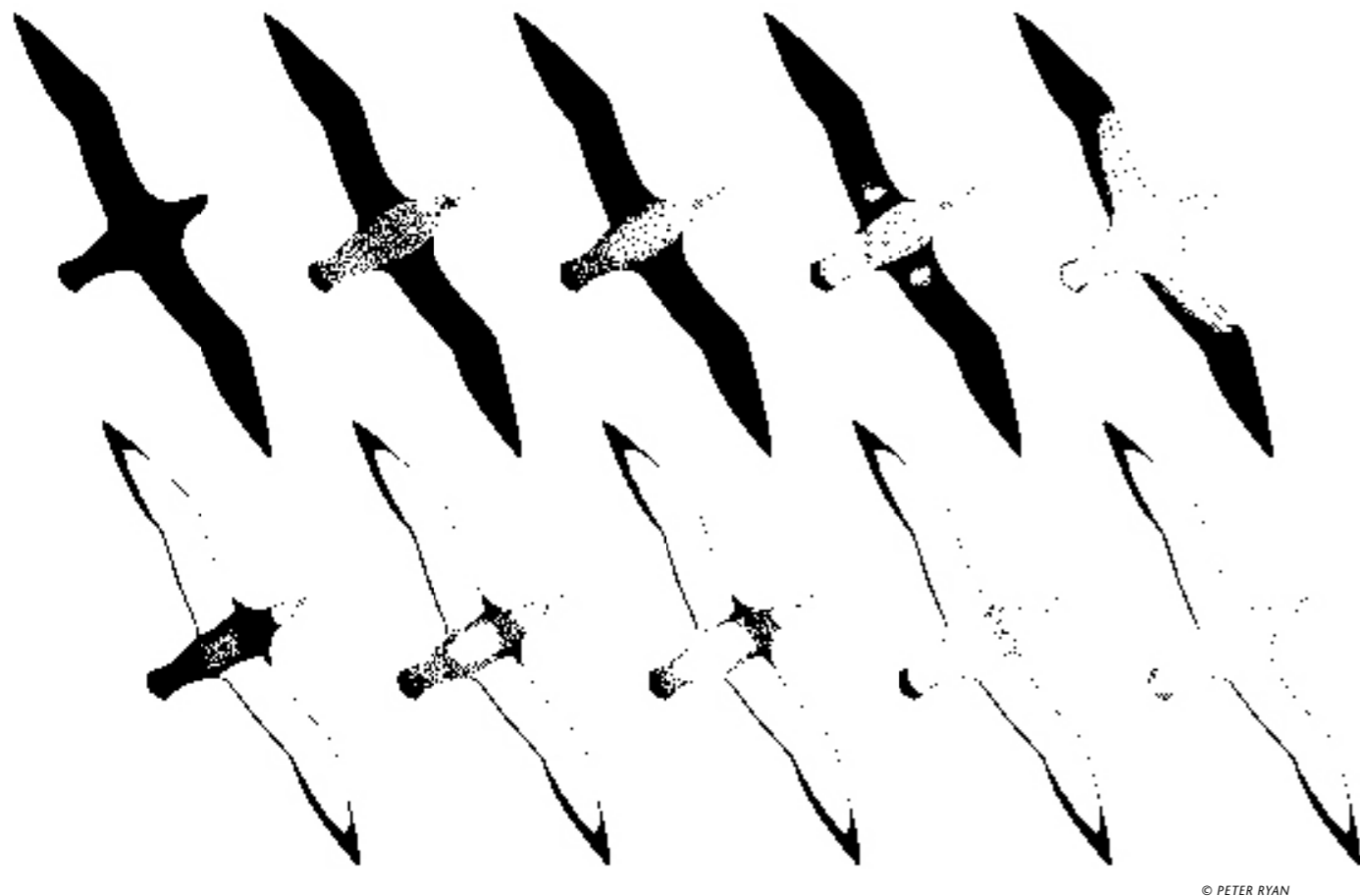
southern Africa. In the hand, the Tristan Albatross is smaller than a Wandering Albatross of the same sex. But this is of no use in the field, and little has been published on how to separate the various Wandering Albatrosses at sea.

During the summer of 1999/2000 I was fortunate to spend several weeks on Gough Island and three months on Inaccessible Island, which together are home to all Tristan Albatrosses. Then, in April 2000, I spent three weeks on Marion Island, where there is a large population of nominate Wandering Albatrosses. Here are my preliminary conclusions about the possibility of separating the two taxa in the field.



A 17-year-old Tristan Albatross (presumed male) breeding at Gough Island (right) is slightly darker on the wings than a seven-year-old non-breeding male Wandering Albatross at Marion (centre), and considerably darker than a 13-year-old breeding male Wanderer (far right).





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Inferred plumage sequence of the Tristan Albatross, showing upperparts (above) and underparts (below), based on field sketches and photographs. Birds become progressively paler from fledglings (left) to old males (right). Note the retention of prominent breast bands on birds with pale backs.

Complex plumage patterns

The Wandering Albatross is well known for its complex series of age-related plumage changes. Unlike most birds that acquire a fixed adult plumage, the Wandering Albatross continues to change, becoming progressively whiter until it is 20 to 30 years old. Fledglings are brown all over except for the underwings, face and throat. With each successive moult, the brown body plumage is replaced with white feathers. This happens rapidly on the underparts, but is more protracted on the upperparts, giving a mottled appearance (the so-called 'leopard' stage).

The body plumage then becomes almost all white with fine dark barring, termed 'pencilling'.

On the underparts the pencilling often forms a breast band, with some brown mottling persisting on the thighs and undertail coverts. Pencilling also replaces the mottling on the back and rump, although a dark cap (or vestiges thereof) may be retained into early adulthood.

Once the back is only lightly pencilled, the upperwings begin to whiten from the elbow joint, in the centre of the wing close to the body. This forms a ragged white oval which gradually spreads until all the coverts are white. With time, the pencilling on the body plumage gradually fades, leaving the oldest birds all white except for the dark flight feathers. Males whiten much more rapidly than females, and attain a white final plumage, but old females are whiter than newly adult males. Use

of plumage pattern at sea is not helpful in sexing birds, apart from the very whitest males. Females are on average smaller than males, and with practice, given a good look at the bill, the sex can be determined fairly reliably. Males have noticeably deeper bills than females, with less of a slender saddle behind the nail.

Tristan or Wandering?

Since the 1970s, several thousand albatross chicks have been banded at both Gough and Marion islands. I compared known-age and -sex birds and described extreme forms in the breeding populations. The photographs on pages 36 and 37 tell the story. In brief, faced with a single bird at sea, of unknown age and sex, I could find no definitive character that allows separation, but there are some possible differences that require further investigation.

Juvenile Tristan Albatrosses leave the nest in a paler, greyer plumage than Wandering Albatrosses, but we don't know how this plumage changes until the birds return to their breeding islands. Tristan Albatrosses take longer to replace the juvenile plumage than Wandering Albatrosses. Most breeding Tristans have a large amount of black on the upperwing (corresponding to Harrison's stages 4 and 5), whereas most breeding Wanderers at Marion are stages 5 to 7. However, I did see a few Tristans on Gough that had almost all-white wing coverts and no dark feathers visible in the tail (stage 7, and see figure on page 38). The same pattern of delayed whitening occurs among the two New Zealand forms, Gibson's and Antipodean albatrosses.

Tristan Albatrosses begin breeding at an earlier age, starting as young as six, with the average age of first breeding being eight to nine years, compared with 10 to 12 in Wandering Albatrosses. But this doesn't account for the darker plumage of adults. The nine-year-old presumed female photographed on Gough is at least as dark as the darkest four- to six-year-old pre-breeding birds at Marion Island. Similarly, the 17-year-old presumed male is similar to a seven-year-old Wandering Albatross. Unfortunately, this difference is of little use if you don't know the age and sex of the bird you're attempting to identify.

Among adult albatrosses, the only possible feature I found was that Tristan Albatrosses retain the pencilling on the underparts longer, relative to the upperparts, resulting in a prominent breast band. However, more birds of known age and sex

need to be examined. Wandering Albatrosses are characterised by considerable variation in plumage between individuals even of the same age and sex. In 2000/01 ornithologists will be based at Gough Island for a full year, and one of their tasks will be to gather more information on plumage development in Tristan Albatrosses.

Implications for birders

Assuming that there is no easy way to separate Tristan and Wandering albatrosses in the field, birders might be tempted to reject the notion of recognising them as distinct species. But this has some interesting consequences. The genetic evidence suggests that the Amsterdam Albatross is most similar to the widespread, nominate Wandering Albatross (Nunn & Stanley, 1998). The two New Zealand forms, *gibsoni* and *antipodensis*, form another species pair, with the Tristan Albatross being the most distinct form. The point is that if we recognise the Amsterdam Albatross as a 'good' species – which most birders are happy to do – then we should recognise at least the Tristan and New Zealand populations as distinct from southern, nominate Wanderers.

Unfortunately, this type of problem is going to become ever more prevalent as types of evidence not readily apparent in the field (for example genetic and skeletal characters) are used to define bird species. There is no easy solution for birders – the best we can do is to use our birding skills to try to detect visible differences, and learn to accept that it may not be possible to identify some birds to species. □

Further reading

Harrison, P. 1983. *Seabirds: An Identification Guide*. Croom Helm, Beckenham, Kent.

Nunn, G.B. & Stanley, S.E. 1998. 'Body size effects and rates of cytochrome b evolution in tube-nosed seabirds.' *Mol. Biol. Evol.* 15: 1360–1371.

Prince, P.A., Weimerskirch, H., Huin, N. & Rodwell, S. 1997. 'Molt, maturation of plumage and ageing in the Wandering Albatross.' *Condor* 99: 58–72.

Weimerskirch, H., Lequette, B. & Jouventin, P. 1989. 'Development and maturation of plumage in the Wandering Albatross, *Diomedea exulans*.' *J. Zool., Lond.* 219: 411–421.