

definite alternating behaviour, presumably caused by a conflict of underlying tendencies. Several times the Orioles would approach almost to the nest with the food and then retreat again. Certainly the phenomenon needs explanation. Could it be that the resemblance of the Oriole chick to the Friarbird chick induces an approach/fear conflict in the adult Oriole?

The data on antiphonal duetting by the Helmeted Friarbird reinforce data already collected (Clapp, 1982(a); Clapp 1982(b)). It is assumed that the higher, pitched and lower pitched birds are female and male respectively although there is no hard evidence to support this assertion. At any event it is clear that either male or female may initiate an antiphonal duet, as the number of instances of duets initiated by either lower or higher pitched calls were approximately equal (seven versus eight).

Last, the author agrees with Diamond (1982), that we need more data from field studies on the interactions of Friarbirds and Orioles. As well as general field studies on the *Oriolus/Philemon* complex, it would be particularly enlightening to have field data of species in places where the mimicry is almost perfect, such as on Ceram in the Moluccan Islands. Particular attention needs to be paid to nesting of the two species in circumstances where they practice proximity nesting. Crucial observations would be of the young just before and after fledging.

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Address: 6 Seal Street, Paddington, Queensland, 4064, Australia

## BLACK TERN *CHLIDONIAS NIGER* AT MOITAKA SETTLING PONDS, CENTRAL PROVINCE - FIRST RECORD FOR THE NEW GUINEA REGION

BRIAN W. FINCH

On 18 May 1985 the author was accompanied by Tim Murphy (visiting from Brisbane), Eric Shackleton and David Cormac (visiting from Melbourne), and we were calling in at Moitaka at 16:00 hrs on the off-chance that something of interest might be there. In view of the date, nothing out of the ordinary was expected.

Immediately on getting out of the vehicle BWF checked a party of terns feeding at the in-flow pipe of one of the new ponds. Amongst the Whiskered Terns *Chlidonias hybrida*, and Gull-billed Terns *Sterna nilotica*, was bird that was immediately recognised as a black Tern *Chlidonias niger*, and BWF drew attention to it. The bird was in complete immaculate breeding plumage.

The other observers and the author were all familiar with this species in its usual range, and everyone agreed on the identification. After we had watched the bird for several minutes it flew off towards Waigani Swamp and did not reappear.

The following day (15:00 hrs), Tim Murphy and the author returned to Moitaka, this time accompanied by Paulene and Bob Kibble. The Black Tern was located amongst the other terns on the muddy spit which used to be the bank between the two larger tanks, but which has now been removed. This three-hundred metre long strip of muddy hummocks is very attractive to birds and they cannot be disturbed on foot. These ideal conditions have caused other palaeartic species to remain much later than normal: fifty Common *Sterna hirundo*, four Little Terns *Sterna albifrons*, five white-winged Black Terns *Chlidonias leucoptera*, one each of Black-tailed Godwit *Limosa limosa*, and Pectoral Sandpiper *Calidris melanotos*. The last named was particularly unusual for the time of year and the only individual member of all of the above-named that was in nuptial plumage (apart from the Black Tern).

After a short while the Black Tern flew from the spit with a party of Whiskered Terns to feed at the in-flow pipe at the place where it had first been discovered. After feeding for about fifteen minutes, the bird flew back towards and over us, and rested again on the spit.

### DESCRIPTION

The head and entire underparts down to the lower belly are immaculate black; undertail coverts to vent, and a slight tracing on to the hind flanks are white. The mantle, entire

wing area, rump and tail are uniform pale slate. In the strong sunlight the bird showed a most attractive bluish cast when seen from some angles. The underwing was wholly greyish-white contrasting starkly with the black of the underparts in a straight line demarcation. The underwing coverts were very pale greyish-white, whilst the undersides of the flight feathers were darker. The undersides of the first few primaries were a much darker grey. When the bird was seen from front-one or nearly so, a narrow but very conspicuous white line could be seen along the leading edge of the wings from the body to the carpals. The blackish bill was long and slender, the feet reddish and the tail quite obviously forked.

### HABITS

When feeding, the birds showed much more grace than the Whiskered Terns, dipping and swooping from a greater height, and when rising it traced more gentle arcs than that species. The wings, which appeared broader and fuller, seemed to enable a greater precision of movement. Sometimes the bird would dash about madly zigzagging all over the area, playfully diving at and being dived at by other terns for no apparent reason but in a way that was typical of the *Chlidonias* terns. The whole effect was that of a more graceful flyer than all other terns present.

Although the White-winged Black Terns preferred to rest rather than feed and did not allow for a direct comparison, nuptial plumaged birds had been seen recently. Whilst they are more graceful "bouncier" flies than Whiskered Terns the author gained the impression their wing strokes are shallower than this Black Tern's and their swooping more abrupt. When resting the Black Tern favoured raised clods of mud rather than flat ground.

### COMPARISONS WITH WHITE-WINGED BLACK TERN IN BREEDING PLUMAGE

In spite of the close relationships between *C. niger* and *C. leucoptera* and the difficulty in separating the two species (except in juvenile plumage, when *leucoptera* has a very dark saddle), the differences in breeding plumage are many.

**BILL:** The black bill of *niger* is longer and more slender than the short, almost Little Gull-like, red bill of *leucoptera*. It is the short bill of *leucoptera* that always reminds the author of a small gull (particularly Little Gull *Larus minutus*) when observing the resting bird. The winter head pattern only enhances the resemblance. The slender bill of *niger* combined with the solid black crown in winter plumage is in every way typical of terns.

**WINGS:** The underwing of *leucoptera* is extensively black on the coverts, showing as an extension of the black underparts; the line where the wings join the body is indistinct. The undersides of the flight feathers are stark whitish with grey tips. The underwing of *niger* is the reverse: there is no black on the underwings at all, and the contrast where the wings join the body is startling. The underwing

coverts are greyish white, whilst the undersides of the flight feathers are darker. From the upperside *leucoptera* has wholly white wings apart from some greyer edging to the flight feathers. This is sharply contrasted against the black back and mantle, which is as black as the head and underparts. This in turn contrasts with the pure white rump and tail. The entire upper surface of *niger* is bluish-slate, and the back of the head merges into the slaty grey of the upper back.

**RUMP AND TAIL:** The rump and tail of *leucoptera* are pure white, contrasting sharply against the black of the back and mantle. The tail is shallowly forked. Because the entire upper parts of *niger* are more or less uniform, the bird is subtle when compared with the arresting black and white of *leucoptera*. The tail of *niger* is more deeply forked.

### DISCUSSION

Black Terns are a very long way out of their normal range when they visit the Australia Region. Their breeding range is widespread in North America, but in Eurasia is mainly confined to Europe and extending to the Upper Yenisei and Russian Turkestan (Vaurie, 1965). Records east of the line are very few. There is a single sight record from Delhi in India, which Ali & Ripley consider as doubtful (Ali & Ripley, 1968). There have been a few records in Japan, which could relate to the North American race *surinamensis*. There is also a record from Hong Kong, where yet again the author considers the record doubtful (Webster, 1976).

The entire North American population winters in South America, whilst the Western Palearctic population *niger* winters entirely in tropical and sub-tropical Africa. Up to the present, three individuals have found their way to the Australasian region, all to Australia. There are two records for New South Wales: Tuggerah Lakes, September 1958, and Kooragang Island, Newcastle, January to March 1968: and one for Western Australia at Lake Joondalup, December 1973. All of these records related to birds in non-breeding plumage, (Pizzey, 1980). This most attractive individual at Moitaka constitutes only the fourth record for the Australasian Region, and the first to be discovered in full breeding plumage. The extensive white on the vent and undertail coverts suggests that this individual is a member of the Western Palearctic race *niger*.

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