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A COMMON TERN IN THE BAY OF PLENTY

By P. C. M. LATHAM

On 8 April 1984, as B. Chudleigh and I were examining a flock of White-fronted Terns (*Sterna striata*) at the mouth of the Rangitaiki River, we noticed a tern with an all-black cap. It was slightly smaller and darker grey than the White-fronted Terns and had no white front. Shortly afterwards it flew away from us, showing a white rump and tail which contrasted sharply with its grey wings and mantle — rather like a large Black-fronted Tern (*Sterna albobriata*). The bird settled again with the White-fronted Tern flock and over the next half hour or so, I, together later with Mr & Mrs W. M. Hutton, studied it from 20-30 m away, while BC photographed it. Although at first the light was poor and a heavy shower of rain fell, conditions improved to bright sunshine. The bird was put to flight several times, once giving me an excellent view of it from below against the light. It did not keep to the edge of the flock but mingled freely, without animosity, with the White-fronted Terns.

DESCRIPTION

Body size: Slightly smaller and slimmer than a White-fronted Tern.

Forehead, crown and nape: Black from the base of the upper mandible over the entire crown to just below the eyes and down the nape to the mantle. There were a few tiny white feathers at the base of the upper mandible, which looked as though they were moulting out. The forehead sloped shallowly back to the crown, giving a rather flat-crowned "snaky" appearance to the head, similar to that of the White-fronted Tern.

Lores, cheeks, chin and throat: White, gradually darkening to grey on the neck and upper breast; not a well-defined line as in the Black-fronted Tern.

Neck and upper breast: Pale grey, gradually darkening toward lower breast.

Lower breast, belly, mantle and back: Grey, darker than on White-fronted Tern, but not as dark as on Black-fronted Tern.

Upper wing: The coverts were darker grey than the breast, belly, mantle and back; the visible primaries were very dark, almost black; the secondaries and tertials were a paler grey than the coverts and had white tips. There was no dark carpal bar. The tips of the folded wings extended well beyond the tail tips.

Underwing: Pale grey except for the blackish tips to the outer primaries. The tips of the secondaries and tertials, which were white, gave a white trailing edge to the inner wing. The first few primaries (those nearest the secondaries) were white and formed a noticeable translucent panel when the underwing was seen against the light. The outer primary, P10, had a very broad blackish band (not noticed in the field but seen in photographs viewed subsequently).

Rump, upper and lower tail-coverts: White, contrasting sharply with the grey belly and back.

Tail: Deeply forked; white except for the outer webs of the outer rectrices, which were blackish; the tips did not extend beyond the folded wing tips.

Bill: Black with no red at the base. It was as long as and of similar shape to that of a White-fronted Tern.

Legs and feet: Dull reddish, paler and slimmer than those of White-fronted Terns, but of similar length.



FIGURE 1 — Heads of Eastern Common Tern, above, and Arctic Tern, below, in breeding dress, right, and non-breeding dress, left.

The difference in head shape of the two species, slightly exaggerated here, is less noticeable in the field. It is very difficult to pick if bird is active or is hunched up in cold or windy conditions. Note the more extensive white front of the Arctic Tern in non-breeding dress. It extends well behind the eye, whereas that of the Eastern Common Tern reaches to just above the eye. The Arctic Tern's bill is all red in breeding dress. In non-breeding dress it is black, often with a dull red patch at the base, though this is difficult to see in the field. The bill of the Eastern Common Tern is black all year round.

It was obviously a *Sterna* tern, but which? As it appeared to be an adult in fresh breeding plumage, Antarctic Tern (*Sterna vittata*) was ruled out. In April, Antarctic Terns would be in worn breeding plumage or have begun a complete moult into non-breeding dress (P. M. Sagar, pers. comm.). In non-breeding plumage, the adult and the subadult Antarctic Tern have an extensive white front, white underparts and a dark cubital bar. In breeding dress the Antarctic Tern has a bright red bill and legs, white underwings and white, or very pale grey, outer edges to the outer rectrices of its tail (Watson 1975).

Equally definitely it was not a White-fronted Tern, plenty of which were about for direct comparison. This bird was a little smaller, much greyer, had no white front, had dark outer edges to the outer rectrices of its tail, had paler legs and, unlike the White-fronted Terns, was in breeding dress.

Though the Roseate Tern (*Sterna dougalli*) breeds as close to New Zealand as Queensland and New Caledonia, it has not been recorded here. This species may be quickly eliminated, too, being a very pale bird. In breeding dress the breast and belly are white, with sometimes a rosy tinge, and the tail streamers, which extend well beyond the folded wing tips, are completely white. No dark primary tips show on the underwing. The bill is black with a red base and the legs and feet are red (Slater 1970).

The Arctic Tern (*Sterna paradisaea*), which I have seen on three occasions in this locality, is not quite so easy to eliminate. However, the Arctic Tern in breeding plumage has a blood red bill and coral red legs, both the bill and the legs being shorter than those of the White-fronted Tern. The tail streamers reach, or project a little beyond, the folded wing tips (unless the bird is in moult). The underwings are white at all seasons, except for the dark grey outer primary tips. Though the outer primary, P10, has a dark band, the band is narrow (Marples & Marples 1934, Serventy *et al.* 1971). In the photographs, the P10 band on this bird was much too broad for that of an Arctic Tern (C. Corben, pers. comm.). The Arctic Terns that I have seen among White-fronted Terns had steeper foreheads and more domed crowns than their neighbours (Latham 1981) and this feature is considered important by Jacobsen (1961) and Vande Weghe (1966) when separating Arctic Terns from Common Terns. In winter and subadult plumage the Arctic Tern has a white front, breast and belly (Watson 1975).

The only other likely tern is the Common Tern (*Sterna hirundo*). One feature in my description is considered distinctive of the Common Tern, namely, the translucent patch formed by the four white inner primaries, seen when the underwing is viewed from below, against the light. First described by Richardson (1953), this field mark is said, by Hume & Grant (1974), to be "Perhaps the most useful plumage mark in the British literature . . ." In addition, the very broad dark band of the outer primary (though difficult to assess without the benefit of comparison), the legs being a similar length to those of the accompanying White-fronted Terns, and the shallow-forehead flat-crowned look of the bird are all points which reinforce the bird's identification as a Common Tern rather than an Arctic Tern, the most difficult species to distinguish from it.

However, the Rangitaiki River mouth bird does not altogether answer the description of the Common Tern to be found in most books. As an adult in breeding dress, it did not have the conventional vermilion legs and feet, orange-red bill with a black tip, or pure white breast and belly (Bannerman 1962).

The Common Tern is a more complex species than the Arctic Tern. Four subspecies are recognised, all strongly migratory, but their geographical variation is clinal with tendencies for longer wings, darker grey plumage and darker bill and legs from west to east.

The nominate race (*S.h.hirundo*) is the palest race. It breeds in North America, West Indies, Azores, Canaries, Madeira, northwest Africa, Europe, USSR west of the Ob River and south of the Arctic Circle, Afghanistan, Iran, Iraq and Turkey, and it migrates south to the Straits of Magellan and the Falkland Islands, the Cape of Good Hope and Madagascar and the Persian Gulf east to at least Sind in India (Vaurie 1965). In breeding dress the upperparts are dove-grey, the underparts (breast and belly) pure white, the legs and feet vermilion and the bill orange-red with a black tip (Bannerman 1962).

The race breeding in central and southern Siberia, and wintering presumably in southeastern Asia (*S.h.minussensis*), grades into nominate *hirundo* in the west and *longipennis* in the east. It averages slightly darker above and below than nominate *hirundo* and, though the colour of the bill, legs and feet varies individually, it always has a blacker bill than nominate *hirundo* and its legs and feet are usually brownish rather than red (Vaurie 1965).

The Eastern Common Tern (*S.h.longipennis*), breeding in northeastern Siberia and wintering in Indonesia, New Guinea, the Louisiades and the Solomons (Dementiev & Gladkov 1951) and Australia (Blakers *et al.* 1984), averages slightly darker than *minussensis*, the bill being wholly black in nearly all birds and the legs and feet varying from reddish brown to dark brown or black (Dementiev & Gladkov 1951, Vaurie 1965). A photograph in Coates (1977) shows this variation in leg colour well.

The fourth race (*S.h.tibetana*), which breeds in high central Asia — Turkestan, Tibet and Ladakh — and winters in India, is the race with darkest plumage, being darker above and below than *minussensis* and *longipennis*, but the colour of the bill, legs and feet is similar to that of nominate *hirundo* (Vaurie 1965).

Having learned all this, the anomalies in the description of the Rangitaiki tern can be understood. It presumably belongs to one of the eastern races *minussensis* or *longipennis*. Although *tibetana* is a grey bird, its bill, legs and feet are similar in colour to nominate *hirundo*. Even in winter dress this race, like nominate *hirundo*, retains some red at the base of an otherwise black bill (Henry 1955, Ali & Ripley 1981). As *minussensis* is not monotypic but grades from nominate *hirundo* in the west to *longipennis* in the east, the Bay of Plenty tern could be a bird from the eastern range of this race. However, it is far more likely to have been a *longipennis*, which is a regular migrant to the east coast of Australia. At least some authorities no longer recognise *minussensis* as a valid subspecies (Cramp 1985). This would place the Rangitaiki bird even more surely in the *longipennis* camp.

Dementiev & Gladkov (1951) stated that "It is noteworthy that the subspecies *S. h. longipennis* resembles [nominative *hirundo*] even less than the Arctic Tern does." It is certainly a very different-looking bird from any nominate *hirundo* that I have seen in Europe. The only illustration of *longipennis* in breeding dress that I could find in the literature was that in Sonobe *et al.* (1982), and this matched the Bay of Plenty bird. Photographs of the same race in non-breeding plumage taken in Australia may be seen in Simpson (1972), Wade (1975) and *Complete Book of Australian Birds* (1977).

The Common Tern is now recognised as a regular austral summer migrant to Australia. As recently as 1940, Hindwood wrote, when mentioning the three Common Terns collected by Roy Bell on Lord Howe Island in February 1915, "There are no authentic records from Australia". Four years later the Common Tern's occurrence in Australia was first reported (Hindwood 1944). Over the next 20 years reports trickled in, which resulted in Hitchcock (1965) stating that "These data suggest that south-eastern Australia is a minor wintering area for the black-billed race *S. h. longipennis*". Neither Dementiev & Gladkov (1951) nor Vaurie (1965) mentioned Australia as a wintering ground. In the last 20 years a remarkable increase in this species has been recorded in Australia, no doubt partly due to more, and better informed, observers looking for it. There is evidence to support this view in the form of allusions to the occurrence of *longipennis* in northern Australia (Robert Hall in Hitchcock 1965) and the probable misidentification of *Sterna frontalis (striata)* at North-west Cape, Western Australia, in the summer (Carter 1904 in Hitchcock 1965). It may however, reflect an extension of the bird's non-breeding range, a population increase, or both.

The easternmost race *longipennis*, which breeds in northeastern Siberia south of the Arctic Circle, is an abundant passage migrant in April-May and August-September through Korea (Gore & Won 1971) and Japan (Sonobe *et al.* 1982) but is rare in Hong Kong (Herklots 1967). It does not appear to have been recorded with any frequency in Borneo (Symthies 1981) or the Philippines (du Pont 1971), and yet Indonesia, especially the Sunda Islands, is said to be a main wintering ground (Dementiev & Gladkov 1951). Though Vaurie (1965) described eastern India south to Ceylon as a wintering ground of *longipennis*, neither Henry (1955) nor Ali & Ripley (1981) mention any subspecies but *tibetana* and nominate *hirundo* as occurring in this area. Perhaps, as Finch (1982b) suggests, Vaurie was wrong and the wintering grounds of *longipennis* may be entirely within the Australasian region. It has been recorded in Guam (Bourne 1964) and is described as a passage migrant through the Palau Group in Micronesia by Mayr (1945). Papua New Guinea is a major wintering area, where it is often abundant (Coates 1977, Finch 1982a,b) and it is a common summer migrant to the northern Solomons (Hadden 1981). After plotting any definite records of *longipennis* that he could find in the literature, (Finch 1982b) concluded that "if a line of longitude were taken from just west of Korea to New Guinea, then continuing east of that line down the coast of Australia, the bird would be encountered west of that line only as a vagrant." A race of the Common Tern is a rare visitor to Fiji (Watling 1982) and though this is most likely to be *longipennis* it is not certain. Hannecart & Letocart (1980, 1983) have not recorded the Common Tern in New Caledonia.

Apparently *longipennis* is the race that migrates most commonly to northern and eastern Australia, from Port Hedland to South Australia, being seen, at least occasionally, in flocks of 1000 or so (Blakers *et al.* 1984). On October/November visits to southeast Australia I found it, in tens rather than hundreds, about Montague Island, Bermagui and Tathra, New South Wales, in 1984 and Apollo Bay, Victoria, in 1980. In the Port Hedland area of Western Australia the species is "plentiful and regular from early September to late April", with predeparture flocks of up to 800-1000 birds (J. Darnell *in* Serventy & Whittell 1976), though it does not seem to have been determined which race, or races, are involved. Some birds are known to remain in New Guinea and Australia through the winter (Finch 1982a,b; Blakers *et al.* 1984).

Two of the nominate *hirundo* have been recorded in Australia, both wearing bands, one from Sweden found near Fremantle and one from Northern Ireland found in Victoria (Serventy *et al.* 1971). Two other birds of the same race, again wearing bands, but with a North American origin, have been recovered in the central Pacific — one in the Cook Islands from Saskatchewan and one in Hawaii from Michigan (Hitchcock 1965). A specimen from Goolwa, South Australia, has been identified as *minussensis* (Blakers *et al.* 1984) and others from that area are suspected to be of this race (Eckert 1969). The bird from Buckland Park, Port Gawler, South Australia, originally thought to be of the race *turkestanica* (Hitchcock 1965), which is no longer recognised (Bannerman 1962), may well have been a specimen of *minussensis* too. The race *minussensis* is only presumed to winter primarily in South-east Asia, though the description of the Common tern found in that region certainly fits that race (King *et al.* 1975). It may well be that a sizeable percentage of the regular wintering flocks of Western Australia are also of this race. While studying the literature it became apparent to me that there is a lack of precise knowledge of the winter quarters of the various races of the Common Tern.

As the Common Tern is now so commonplace in eastern Australia each year, it is not surprising that one has been seen here. Indeed after examining the Rare Birds Committee file on "commic" terns I found that there has been a steady trickle of unconfirmed reports over the last 10 years or so:

Waitangi River estuary, 25/4/72, a single bird (Giblin, Taylor & Todd).

Walker Beach, Point Chevalier, Auckland, a single bird considered to be a Common Tern, 21/11/80 (Jowett).

Lake Horowhenua, five "commic" terns two of which were thought to be Common Terns, 29/11/80 (Heather & Gollop).

Waiwhatawhata Beach, Hokianga, a single bird which may have been a Common Tern, 30/11/80 (Bettesworth).

Palliser Point, a flock of 12-13 birds some, if not all, of which were thought to be Common Terns, 29/10/81 (Squire & Fawcett).

Waikanae River mouth, a single bird tentatively identified as an Antarctic Tern but the description given would fit an Arctic or Common Tern equally well, 8/11/81 (Tennyson).

Lake Ferry, Palliser Bay, a single bird thought to be a Common Tern, 8/4/82 (Heather & Squire).

Some of these, almost certainly, were Common Terns, the descriptions of the Walker Beach, Palliser Point and Lake Ferry birds being particularly fitting. In addition to these was the finding of the fragmentary remains of a bird, thought to be of this species, at Karekare, Auckland west coast, on 23 August 1959 (Falla *et al.* 1979). Note that all the above sightings, except for the late October one, have been made in November or April.

Hitchcock wrote in 1965 "An additional aim [of this paper] is to alert coastal observers in eastern and south-eastern Australia, and in New Zealand, to watch more closely for the species . . ." It has taken 20 years since then to record positively the first Common Tern in New Zealand; I suspect that it will not be long before we have more.

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SHORT NOTE

Second New Zealand record of the Bird of Providence

On 22 September 1984 I found a beach-wrecked Bird of Providence (*Pterodroma solandri*) on the west coast of Northland between Maunganui Bluff and Omamari. The bird was identified by D. E. Crockett and subsequently the identification was confirmed by M. J. Imber. This is only the second record of this species in New Zealand, the first being that found by Falla on Muriwai Beach in January 1921. The specimen from Northland is now held at the National Museum.

Description: Back grey-brown. Head dark brown. Uppertail brown. Face and forehead freckled. Belly white in centre, grey on sides — each feather mostly white with a 10 mm grey tip on the end. Small pale tip right on the end of some feathers. Underside of tail grey-brown.

Underwing: primaries grey-brown on outer vane and tips, paler to white on basal half of inner vane.

Feet: black — paler at base of toes
 Legs: paler — brown
 Bill: black — large

Measurements (mm)

Culmen: 33.22
 Bill width: 14.40
 Bill depth: 16.08
 Tarsus: right 42.14, left 41.36
 Mid-toe & claw: right 59.0, left 59.10
 Wing: 310
 Length: 420

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