The eventual identification of a Royal Tern in Mid Glamorgan

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At about 15.30 GMT on 24th November 1979, at Kenfig Pool, Mid Glamorgan, I scanned a group of Common Larus canus and Black-headed Gulls L. ridibundus and discovered, settled on a post, a tern with a prominent yellow bill and a black wedge through and behind each eye. It was a species unfamiliar to me and I watched it for several minutes at a range of about 100m and took a description. I was still unable to identify it, so I left to telephone other birders. Nobody lived close enough to reach Kenfig Pool by dusk, but I was able to discuss my initial field notes with Peter Lansdown in Cardiff. The light was fading fast, but I returned for further views of the tern. It was still on the post, obviously tired and easily approached; it was ringed, so I slowly waded into the water and was able to stand, thigh-deep, within 3m of it and read the first part of the ring number. I began a field sketch (fig. 1), but two Mute Swans Cygnus olor crashlanded nearby and the tern launched itself unsteadily from the post. Despite its apparent exhaustion, it completed a low circuit of Kenfig Pool before flying off languidly towards nearby Kenfig Sands. The whole area was thoroughly searched on the following day, but the tern was not relocated.

The following description is a summary of my notes and sketches made in the field (except where noted):

size and shape Only (rather distant) size assessment was in comparison with Black-headed Gull on adjacent post: two noted as being similar in size. (When asked, at much later date, I recalled that the tern was a little longer and fractionally bulkier than the Black-headed Gull.) Bill as long as head, stouter than that of Sandwich Tern Sterna sandvicensis, and with slightly drooping effect, frequently pointed downwards in flight. Legs

Fig. 1. Immature Royal Tern Sterna maxima, Mid Glamorgan, November 1979 (traced by R. A. Hume from pencil sketch by S. J. Moon)

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long and sturdy. Noticeably front-heavy appearance at rest due to bill, stocky head and neck, and short body. Wing-tips projected well beyond tail. In flight, wings looked narrow and extraordinarily long, and tail forked, though not deeply, and rather short. PLUMAGE 'Bald-headed' appearance due to black-speckled, white forehead and fore-crown and black, erectile crest, which was raised at my approach. Small, black square in front of and adjacent to each eye, behind which a black wedge of increasing width extended up to the rear crown. Remainder of head, nape, whole of neck and whole of underparts white. Mantle, scapulars and much of upperwing-coverts pale grey, similar to, though perhaps shade paler than, upperparts of Black-headed Gull (but assessment of grey plumage tones perhaps deceptive in poor light). Lesser or median coverts scaly (at rest, showed as small, mottled area at carpal joint). At rest, exposed primaries slate-grey, with pale tips from fifth or sixth inwards. Secondaries and tertials with dark centres, and pale edges (broadest on tertials), and thin, dusky line showed along bottom of closed wing. In flight, rump and uppertail appeared pale grey, thus uniform with upperparts in general; distal areas of tail apparently paler, and tail had thin, darker tip and was noticeably slate-edged on both sides. Upperwings in flight displayed dark leading edge and carpal area, darkish bar on secondaries, pale grey inner wing, and trailing edge to secondaries and dark primaries. BARE PARTS Bill bright, rich yellow at distance, but, at close range, matt ochre-yellow tinged orange, especially on upper mandible. Eyes dark. Legs and feet black. Right leg bore dull grey metal ring, taller than wide, with number beginning 72 on lower line.

An initial perusal of the generally available literature quickly ruled out all regularly occurring terns, including Caspian Tern S. caspia, with which I was familiar, because of its greater bulk and very large red bill. A Sandwich Tern with an all-yellow bill could be ruled out by its slender bill. This left three possibilities: Royal Tern S. maxima, Crested Tern S. bergii and Lesser Crested Tern S. bengalensis. Using the available literature, I ruled out Royal Tern at this stage, as that species supposedly is larger than the Kenfig Pool tern, with wing-tips falling just short of the end of the tail or just reaching the tip of the tail when at rest, and has a white rump and tail, an orange-red bill, and yellowish legs in immature plumage. Crested Tern was discounted because of its green-tinged yellow bill and dark, dusky grey upperparts. This left only Lesser Crested Tern, and Wallace (1973) referred to ‘its fairly long and slightly drooping, but not particularly deep, pale orange bill’ and his drawings depict a somewhat thin-billed species. A photograph in Gooders (1969-71, page 1064) shows a bird with a bill structure and jizz very similar to the Kenfig Pool tern and with a grey tail; the text describes Lesser Crested Tern as ‘pearl-grey above and white below . . . completely orange-yellow bill . . . the legs are black . . . resembles the Sandwich Tern in size . . . rather short body and short, deeply forked tail . . . long, narrow-winged appearance’ and described juveniles as having ‘blackish shoulder and dark outer-tail feathers’, all of which, except for the depth of fork in the tail, are characters that fit the Kenfig Pool bird. Unknown to me at that time, this photograph is miscaptioned and shows Crested Tern, not Lesser Crested Tern (see Gooders’s ‘Errata’). With all other similar species ‘eliminated’, and the small amount of available literature on Lesser Crested Tern listing characters that fitted the Kenfig Pool tern, this record was submitted to British Birds Rarities Committee as a Lesser Crested Tern.

The ring, however, was one feature somewhat against Lesser Crested Tern. Although much ringing of this species has been carried out in Australia, and it is possible for a full-winged immature to travel from there into the northern hemisphere, it is nevertheless extremely unlikely, and the
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small amount of ringing of Lesser Crested Terns in other parts of its range (such as Iran and Tunisia) seems unlikely to result in a ringed individual occurring here. It is however, more feasible that an American species such as Royal Tern would appear ringed in Great Britain, and so this possibility was explored by the Rarities Committee. The United States Fish and Wildlife Service, the American ringing organisation, was asked for its comments on the ring aspect of this record and the fact was uncovered that, in 1978 and 1979, rings with the prefix 724 beneath an address were used on young Royal Terns at six breeding colonies on the eastern seaboard of the USA from Metomkin Island, Accomack County, Virginia, in the north to Cape Lookout Channel, Carteret County, North Carolina, in the south. The evidence of the ring thus strongly suggested that the Kenfig Pool bird was a Royal Tern. The question this raised was whether or not new identification criteria could be discovered from hitherto untapped sources to allow the original description to be compatible with and thus support that theory.

The bird was originally thought to be too small to be a Royal Tern. Two things, however, should have been borne in mind: size is very hard to judge on a lone bird, and the closer that one gets to a bird the smaller it seems. It is also interesting to note that the Royal Tern in Kent in 1965 was described by Davenport & Hollyer (1968) as 'a little larger than accompanying Sandwich Terns . . . the bird seemed to be slightly too small [to be a Royal Tern]'. In fact, a Lesser Crested Tern is slightly smaller than either a Sandwich Tern or a Black-headed Gull, whilst a Royal Tern is virtually the same size as a Laughing Gull L. atricilla. This, combined with the stockiness of the Kenfig Pool bird compared with the gracefulness attributed to a Lesser Crested Tern, makes identification as Royal Tern not impossible.

The long wings of the Kenfig Pool bird in relation to the tip of the tail when at rest initially appeared to rule out Royal Tern. Close examination of photographs of Royal Terns revealed, however, that most stand with the wings held well forward and the shoulders projecting beyond the lower breast. The obviously tired Kenfig Pool tern did not display this proud stance, and the resulting lack of prominent shoulders could have been the reason why the wing-tips seemed noticeably longer than usual in relation to the tip of the tail. Additionally, if the tail of the Kenfig Pool tern had been badly worn, which is not inconceivable considering the time of year and the bird's immaturity, it would not only increase the expected projection of the primaries beyond the tail but would explain the rather shallow fork in the tail. A photograph in Gooders (1969-71, page 1063) shows many adult Royal Terns at rest, some of which have wings extending noticeably beyond the tail, despite the longer tail streamers possessed by adults compared with immatures. This illustrates the caution which must be exercised when comparing the relationship between wing-length and tail-length in the field. Another obstacle originally thought to rule against identification as Royal Tern has thus been removed.

The available literature suggested that the pale grey rump and uppertail of the Kenfig Pool tern ruled out Royal Tern. S. C. Madge (in litt.), however, stated of Royal Tern that 'young birds . . . show dark in the tail',
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and P. J. Grant (in litt.) noted 'grey centre rump' when discussing adults, and commented that he would expect a first-winter bird to be even more grey-rumped.

The yellow, orange-tinged bill was also thought to be incorrect for a Royal Tern. Young Royal Terns are, however, yellower-billed than adults, and recent observations of immature Royal Terns by P. J. Grant and R. H. Dennis (in litt.) have shown the bill colour to be yellow or pale orange in the USA in October and orange in the Gambia in January. J. Weske (in litt.) stated: 'Royal chicks, when quite large but not yet flying, still show a fair amount of variation in soft part colors' but also said 'I've never seen a flight-capable Royal that had a bill that was anything but orange . . . It is paler or duller in immatures than in adults.' On comparing photographs of the two species, B. Little (in litt.) stated 'Some Royal first-years had similar coloured bills to Lesser Crested.' Thus, it is clear that considerable variation can occur between yellow and orange bills in immature, particularly first-winter, Royal Terns. Incidentally, T. P. Inskipp (in litt.) observed that, although Royal has the thicker, heavier bill, both Royal and Lesser Crested Terns have bill length equal to head length. Bill colour does not, therefore, rule against the Kenfig Pool bird being an immature Royal Tern.

The black legs and feet appeared originally to exclude the possibility of the Kenfig Pool bird being an immature Royal Tern. Though the leg colour is correct for adult Royal Tern, there are clearly several features which make this bird an immature, as discussed later. Concerning first-winter Royal Terns, P. J. Grant (in litt.) stated 'in September/October they have yellow-ochre legs', and D. J. Britton (in litt.), of observations made in early October, wrote that the legs are 'dirty slightly orangy yellow with odd dark areas'. It is clearly a question of when a Royal Tern achieves the black legs of adulthood. P. J. Grant (in litt.), discussing Royal Terns' legs in early October, stated 'they could well (indeed, are likely to) blacken by five to six weeks later in the year'. The black legs of the Kenfig Pool bird, which was seen on the late date of 24th November, do not, therefore, rule out identification as immature Royal Tern.

Three other useful field characters have emerged from the research carried out on this record regarding the separation of Royal and Lesser Crested Terns: leg length; extent of black on the head (non-breeding birds only); and pattern of the closed wing (immatures only). Directly comparing the two species, R. H. Dennis (in litt.) stated 'The Royal's legs were longer and you could see the knee clearly whereas Lesser Crested seemed lower', and B. Little (in litt.) wrote 'Royal is longer legged [than Lesser Crested]' and 'There is no noticeable thickening at the knees in Lesser Crested.'

Commenting on the small black spot which a Royal Tern has in front of the eye, both D. J. Britton and S. C. Madge (in litt.) confirmed that, whilst they could not be sure of its absence, they did not note this feature whilst watching Lesser Crested Terns. D. J. Britton and R. H. Dennis (in litt.) both pointed out that Lesser Crested Tern has a more slender black mark behind the eye than Royal Tern, and D. J. Britton and T. P. Inskipp (in litt.) commented that the black is less extensive on the nape on Royal Tern than on Lesser Crested Tern, where it extends farther down the nape.
A direct comparison of immatures of the two species in the Gambia in January led R. H. Dennis (in litt.) to comment on the comparative 'patchiness at tip of shorter primaries' with regard to Royal Tern, and his sketches show Royal Tern at rest possessing dark wing-tips, white primary coverts and dark tertials, and Lesser Crested Tern at rest having a much smaller, dark wing-tip, a thin dark lower edge to the closed wing and an otherwise plain grey wing.

The five points upon which Royal Tern had been eliminated prior to the submission of the record (size, relationship between tip of tail and tips of primaries, rump and uppertail colour, bill colour and leg colour) have all been shown to be not incompatible with identification as immature Royal Tern, and several characters possessed by the Kenfig Pool tern (size, bill structure, leg length, extent of black on the head and pattern of the closed wing) are now seen to eliminate Lesser Crested Tern.

Many characteristics displayed by the Kenfig Pool bird clearly show it to be an immature, probably in its first winter: at rest, there was the small, mottled area at the carpal joint, the pale tips to the inner primaries, the dark-centred, pale-fringed tertials, the greyness and dark tip and edges of the tail and the yellowish bill; and in flight there was the dark leading edge to the wing with the pale grey inner wing, and the darkish bar on the secondaries.

After much hard work and research and two recirculations, the record was accepted by the British Birds Rarities Committee as an immature, probably first-winter, Royal Tern. It is the fifth Royal Tern to be recorded in Britain and Ireland, the others being one found long dead in Co. Dublin on 24th March 1954, one in Kent on 28th and 29th July 1965, one in Cornwall on 2nd September 1971, and one in Merseyside and Clwyd on 8th and 22nd September 1974.

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Summary
An immature tern seen at Kenfig Pool, Mid Glamorgan, on 24th November 1979 was at first thought to be and was submitted as a Lesser Crested Tern Sterna bengalensis. Much subsequent discussion and research has produced some new identification criteria for large terns and the record has now been accepted as an immature, probably first-winter, Royal Tern S. maxima, the fifth recorded in Britain and Ireland.

References

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