



Identification of Western Reef Egrets and dark Little Egrets

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The Western Reef Egret *Egretta gularis* and the Little Egret *E. garzetta* are usually recognised as separate species (e.g. Cramp & Simmons 1977; Payne 1979; Hancock & Elliott 1978; Brown *et al.* 1982; Sibley & Monroe 1990), although their relationships are debated. Three, sometimes four, subspecies are described for the Little Egret, including *nigripes* from islands in southeast Asia and the southwest Pacific and *immaculata* from Australia. Only the nominate *garzetta*, which breeds sparsely in Europe, Asia and Africa, is considered in this paper. Two, sometimes three, subspecies have been recognised for the Western Reef Egret. All of them have a mainly coastal distribution and are dimorphic, with dark and white individuals occurring in the same population, together with intermediates in variable proportion: nominate *gularis* breeds in West Africa from Mauritania to Gabon, and *schistacea* (= *asha*) in East Africa from the Red Sea south to Kenya and eastwards to India and Sri Lanka. The form *dimorpha*, which breeds in Madagascar, Aldabra, Comoro Islands, Seychelles and locally in coastal East Africa from southern Kenya to Tanzania, is considered a race of either of the above species, or a species in its own right: the Dimorphic Egret *E. dimorpha* (Payne 1979), now known as the Mascarene Reef-Egret (Sibley & Monroe 1990).

Hancock (1984) and Hancock & Kushlan (1984) have argued that all these forms are subspecies of the Little Egret, on the assumption that interbreeding

occurs between *garzetta* and *schistacea* in India (Naik & Parasharya 1983; Parasharya & Naik 1987) and Kenya (Hancock & Kushlan 1984). No detail was given, however, on the identification of the individuals involved (but see Ashkenazi 1993), and interbreeding is highly surprising in India as Little and Western Reef Egrets have differing breeding seasons there (Naik *et al.* 1981). Voisin (1991) considered that interbreeding is yet to be confirmed. The fact is that the identification of the African and Asian forms remains poorly understood, particularly regarding the white individuals, which are more prone to be mistaken for Little Egrets, while the possibility of a rare dark morph of the Little Egret further complicates the matter. These are problems of concern not only for systematists, but also for birdwatchers in the southern part of the Western Palearctic: small numbers of Western Reef Egrets, both *gularis* and *schistacea*, regularly occur north of their range, from Israel to Morocco and also to the northern Mediterranean shores from Greece to Spain, with most western European records in France and Italy (Yésou & CHN 1986; Grussu & Poddesu 1989; Grussu 1993).

Here we discuss the field identification of Western Reef Egrets of the subspecies *gularis* and *schistacea* in comparison with *garzetta*, based on our field experience of these birds in Sénégal (PJD & PY), the Gambia (PJD), southern Mauritania (PY), Israel (PJD) and Bahrain (PY), often in close association with Little Egrets, and on discussion with observers who know the species from Djibouti, Egypt, northern Mauritania and Ivory Coast. We also present new information on the occurrence of dark individuals in European colonies of Little Egrets.

Description of Western Reef Egret

Size, silhouette and behaviour

Nominate *gularis* is rather similar in size to the Little Egret, and *schistacea* has on average larger measurements, although with much overlap (table 1). Birds of the latter race seen together with Little Egrets usually look bulkier, but not necessarily larger, and some individuals even look smaller.

Both subspecies have a proportionally longer and thinner neck than that of Little Egret, and tend to keep it more hooked or S-shaped: this distinctive shape is always well marked in the case of *schistacea*, and usually so but often to a lesser degree on *gularis*, giving these birds a serpentine silhouette reminiscent of an Intermediate Egret *E. intermedia* or a Purple Heron *Ardea purpurea*.

Both *gularis* and *schistacea* usually show an angular head profile, with the bill and forehead almost in a line and a blunt outline to the rear of the head, while both the forehead and the crown tend to be more gently rounded on *garzetta*. Specific differences in head shape are not constant, however, and depend in part on the bird's behaviour and the effect of the wind.

The bill of Western Reef Egret is on average proportionally longer than Little's: again, the difference is more marked on *schistacea*, although it is not always obvious. There are also differences in bill shape, as discussed below, which again tend to be more obvious with *schistacea* than with *gularis*.

The outer wing is marginally shorter and more rounded on Western Reef Egret, the tip of the folded wing just reaching the tip of the tail; it can, however, also extend slightly beyond the tail, as it does on Little Egret. The more round-



Plate 75. Typical dark Western Reef Egret *Egretta gularis* of race *schistacea*. Note heavy, dagger-shaped bill almost in line with forehead, and shape of rear head. Bahrain, December 1992 (*Pierre Yésou*)



Plate 76. First-summer Western Reef Egret *Egretta gularis* of race *schistacea*. Note thick bill (compared with plate 77), especially at base, yellowish lores, short neck feathers and brown juvenile feathers on coverts and neck. Eilat, Israel, April 1994 (*Philippe J. Dubois*)



Plate 77. Typical dark Western Reef Egret *Egretta gularis* of race *gularis*. Note more slender appearance than *schistacea*, with thinner bill, and presence of retained brown juvenile coverts. Bignona, Sénégal, February 1988 (*Philippe Delaporte*)



Plate 78. Unidentified egret *Egretta*, with bare-part coloration typical of Little Egret *E. garzetta*. Bill is relatively heavy, but still compatible with that species. Horizontal stance and, particularly, shape of neck, however, point to Western Reef Egret *E. gularis*, as does area of grey feathers behind eye. Bignona, Sénégal, February 1988 (*Philippe Delaporte*)

Plate 79. Below, dark first-winter Western Reef Egret *E. gularis* of race *gularis*. Variegated appearance caused by retained bleached brown juvenile feathers contrasting with dark freshly moulted feathers. Ivory Coast, December 1986 (*Thierry Bara*)



Plate 80. Below, Western Reef Egret *Egretta gularis schistacea* in flight. Note large wings and silhouette recalling Intermediate Egret *E. intermedia*. Nabq, Sinai, Egypt, April 1994 (*Philippe J. Dubois*)



winged shape is more obvious in flight, when, combined with a stronger, less buoyant flight action and a stockier body, it makes a flying Western Reef Egret look more like a smallish Grey Heron *A. cinerea* or Great White Egret *E. alba* than a Little Egret. Again, the difference is more marked for *schistacea* than for *gularis*. Lastly, both forms often adopt a more horizontal stance when feeding or resting than does Little Egret.

The feeding actions of the two species reportedly differ, as foraging Western Reef Egrets not uncommonly perform 'wing-screening' (Cramp & Simmons 1977), also called 'double-wing feeding' (Kushlan 1978), as Black Herons *Hydranassa ardesiaca* often do. Little Egrets do, however, sometimes behave similarly (Hancock & Elliott 1978; Sueur 1979; Robert & Voisin 1991; pers. obs.). Ashkenazi (1993) considered Western Reef Egrets to be solitary feeders, which is not true: this species can be gregarious all over its range when the feeding conditions are favourable.

The Western Reef Egret tends to be coastal, frequenting various habitats from rocky shores to mudflats, while for Voisin (1991) 'the Little Egret is not a coastal bird' and usually forages more inland in deltas, marshes and lagoons. There is nevertheless some overlap in habitat use. Little Egrets regularly associate with rocky coasts and marine mudflats (e.g. in the northern part of their range around western France and southern Britain), and locally breed on sea cliffs in Spain (Bernis 1956), and on rocky islets off the French Channel coast (Bargain 1993), while Western Reef Egrets are locally common in inland marshes—not only mangroves—along the lower reaches of West African rivers.

Plumage

The white morph, in which the plumage is pure white, is usually rare in the case of *gularis*. Less than 1% of the Western Reef Egrets that we saw in Sénégal and in the Gambia were white. This morph is found in similar proportions on Banc d'Arguin in Mauritania (J. Trotignon, verbally), where the identity of the white breeding individuals is disputed: de Naurois (1969) called them *garzetta*, and said that they did not pair with dark individuals, but dark × white pairs are currently under study there (B. Lamarche *in lit.*). White individuals are locally better represented farther south (e.g. in São Tomé and in Cameroon: Cramp & Simmons 1977). White individuals are far more common in the case of *schistacea*, usually accounting for at least 10% of the population and locally more than 50% in the northern part of the range (Cramp & Simmons 1977); in large samples identified to morph in Bahrain, 19% to 25% of individuals were white, a situation rather similar to that encountered from northern Egypt to Pakistan (E. Hirschfeld *in lit.*). Some juvenile and immature white-morph *schistacea* have pure white underparts, but on the rest of their body the white feathers are more or less strongly washed grey, sometimes giving a spotted effect (Naik & Parasharya 1983): such individuals are usually assigned to the 'intermediate' morph described below.

The dark morph of *gularis* is basically dark slate-grey, often with a bluish hue and sometimes looking blackish in the field, although dark Western Reef Egrets are much paler than Black Herons when the two species are seen together. A glossy blue or green tinge is visible on the head and upper breast of adults in some

lights, and their underparts are slightly tinged brown. The differences in tone between the different parts of the body are subtle, however, and visible only under favourable conditions. Juveniles are brown or dark grey-brown. Immatures are a shade paler than adults, lack any gloss, and may show browner wings owing to retained juvenile feathers. The only parts of the plumage which are always white in both adults and immatures are the chin and, to a variable extent, the upper throat and lower ear-coverts. Also, there is often a white patch more or less developed on either one wing or both, formed by white primary coverts and, more rarely, the bastard wing, and a few white feathers occasionally occur on any part of the body, but perhaps most frequently on the head and wings.

Dark individuals of the race *schistacea* are often paler than dark *gularis*, being ash-grey, often with a lavender tinge, or sometimes dark grey. The white areas are the same as on *gularis*, although white wing patches extending to the primaries have sometimes been reported from India (Naik & Parasharya 1983).

Individuals intermediate between the white and dark morphs show a variety of plumages. They often have the upperparts a paler ash-grey than those of dark individuals, and the belly and lower breast whitish. This pale area often extends to the front part of the neck and to a variable degree to the flanks, which, together with the sides of the neck, can be mottled grey-and-white. This kind of plumage is not uncommon on *schistacea*, but is rare on *gularis*, at least in the northern part of its range. Also, some grey-backed individuals have a white head, a feature seemingly always associated with pale grey to whitish underparts and neck, and a very large white area on the outer wing: not exceptional in the case of *schistacea* (Naik & Parasharya 1983; pers. obs.), but rare for *gularis*. In another kind of intermediate plumage, which we know only for *gularis*, most of the head, neck and body is white, often with limited dark speckling on the back and flanks, while the wings are mainly grey, often with a few white feathers.

It remains unclear whether adults show such varied plumages or whether they are restricted to immatures, and it is supposed that some intermediate immatures may turn into dark adults (E. Hirschfeld *in litt.*), although this needs confirmation.



Plate 81. Western Reef Egret *Egretta gularis schistacea*. Typical silhouette, with long, relatively thin, 'hooked' neck and proportionally short bill in line with forehead. Hurghada, Egypt, May 1990 (Olivier Pineau)



82 & 83. Little Egrets *Egretta garzetta*



84 & 85. Grey egrets *Egretta*, probably and certainly Little Egrets *E. garzetta*
86. Below, Little Egrets *Egretta garzetta* and Western Reef Egrets *E. gularis*



Bill

The bill of the Western Reef Egret differs from that of Little Egret in being usually thicker, with a different shape. The basal two-thirds of the mandibles are more parallel-edged before tapering to a point either almost symmetrically or with the distal part of the upper mandible markedly downcurved: then the bill may look either dagger-shaped (Hancock & Elliott 1978) or with the culmen downcurved to a greater or lesser extent (Wassink 1978; Jonsson 1992). This particular shape is usually obvious on *schistacea*, which also often have a proportionally longer bill. West African *gularis* have a shorter and less thick bill: while some individuals have a distinctive bill shape, others can hardly be told from Little Egret in this respect.

Breeding adult *gularis* has a black bill (Hancock & Kushlan 1984), whereas *schistacea* has either a yellow or, more rarely, a black one (Parasharya & Naik 1987). The colour varies considerably among non-breeding adults and immatures of both subspecies. Some have a blackish, dark brown or reddish-brown bill, with the base of the lower mandible often a paler brown to pinkish. On others, the bill is paler, horn-coloured or yellowish, sometimes pale pinkish-brown, either plain or with darker brown areas at the base of the upper mandible or extending along the edge of both mandibles.

Adult Little Egret has a dark bill throughout the year, although it can be somewhat paler at the base in winter. Only exceptionally do breeding Little Egrets show a pale, yellowish bill. The bills of immatures are a paler brown, often with a pinkish area at the base of the lower mandible, and a minority of young Little Egrets have one mandible or both very pale, from fleshy-horn to straw-yellow (Yésou 1984; Cope & Cayford 1988; Voisin 1991). Thus, the bill colour of young Little Egrets can be similar to that of Western Reef Egrets.

Legs

Both *gularis* and *schistacea* have on average a shorter tarsus than that of Little Egret, and some Western Reef Egrets look obviously shorter-legged. Although

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Plate 82. Top left, typical adult Little Egret *Egretta garzetta*, but showing pale legs, a feature uncommon for an adult of this species. Bignona, Sénégal, February 1988 (Philippe Delaporte)

Plate 83. Top right, atypical adult Little Egret *Egretta garzetta* with bare-part coloration reminiscent of Western Reef Egret *E. gularis schistacea*. Silhouette and bill shape, however, rule out latter species. Such pale bare-part colour is not uncommon on juvenile and first-winter Little Egrets, but is exceptional on adults. Camargue, France, July 1993 (Olivier Pineau)

Plate 84. Centre left, grey egret *Egretta*, probably Little Egret *E. garzetta*. Note pale base of bill and white head and upper neck (which does, however, have rather an S-shape). La Tapa, Cadiz, Spain, August 1987 (M. Fernandez Cruz)

Plate 85. Centre right, grey Little Egret *Egretta garzetta*. Silhouette, including neck and bill shape, rules out Western Reef Egret *E. gularis*. Uniformly scaled wing feathers indicate a bird of the year. Note pale lower mandible and greenish legs, not rarely found on Little Egrets of this age. Camargue, France, September 1986 (Guy Morel)

Plate 86. Bottom, mixed flock of feeding Little *Egretta garzetta* and Western Reef Egrets *E. gularis gularis*. Dakar, Sénégal, February 1988 (Philippe Delaporte)



The inclusion of plates 75-80 and 82-86 in colour was subsidised by Carl Zeiss Ltd, sponsor of the British Birds Rarities Committee.

Table 1. Measurements (in mm) of Little Egret *Egretta garzetta* and Western Reef Egret *E. gularis gularis* and *E. gularis schistacea*.

Mean, sample size (in parentheses) and range (age and sex combined). (a) Cramp & Simmons (1977); (b) Hiraldo Cano (1971) and Bernis (1971), combined; (c) Vaurie (1965); (d) Ashkenazi (1993 & *in litt.*). Note that tarsus-to-bill ratio helps to separate *gularis*, but hardly *schistacea*, from *garzetta*.

		<i>garzetta</i>	<i>gularis</i>	<i>schistacea</i>
MEASUREMENTS				
Wing	(a)	276 (34) 245-303	265 (23) 244-285	—
	(b)	274 (15) 248-300.5	270 (12) 258-285	—
	(c)	—	277 (10 males)	288 (10) 272-311
	(d)	281 (72) 198-308	—	297 (10) 270-345
Bill	(a)	82 (34) 67-93	83.8 (21) 79-89	—
	(b)	85 (15) 79-95	84.4 (13) 79-91	—
	(c)	—	—	98 (10) 94-103
	(d)	89 (77) 72-98	—	98.2 (10) 92-106
Tarsus	(a)	99.2 (34) 78-112	89.8 (19) 82-94	—
	(b)	104.1 (15) 97-115	90.2 (13) 83-92	—
	(c)	—	—	104 (10) 92-116
	(d)	103.8 (77) 84-115	—	110.6 (10) 105-118
RATIOS				
bill/tarsus	(b)	0.82 (14) 0.77-0.87	0.93 (13) 0.86-0.96	—
tarsus/bill	(c)	1.22 (37) 1.05-1.42	1.06 (19) 0.90-1.17	—
	(d)	1.17 (73) 1.03-1.38	—	1.13 (10) 1.02-1.27

particularly noticeable in the eastern population, this character is, however, not constant, as there is much individual variation and overlap in measurements.

Breeding adults of both species have black legs with yellow feet and lower tarsus, turning orange or red at the peak of courtship (Cramp & Simmons 1977; Hancock 1984; Parasharya & Naik 1987; Voisin 1991). The feet and lower tarsus are sometimes a greenish yellow on non-breeding adult Little Egrets. Exceptionally, adults have wholly pale legs, yellowish to greenish-grey, either in winter or within a breeding colony (plates 82 & 83).

The legs of non-breeding Western Reef Egrets (whether adults or immatures) are much more variable in colour. On *gularis*, the basic colour is a dull brown, with plain yellowish extending from the foot to about the lower one-third of the leg, and yellowish spots of variable size and number often occur on the brown part. Legs tend to be paler on *schistacea* from the Red Sea and Persian Gulf: sometimes dark to medium brown with yellowish to greenish-yellow feet and lower tarsus, but often mostly olive-green or yellowish with darker brown markings on the upper leg. In India, the legs are black and remain so on non-breeding adults according to Parasharya & Naik (1987), with yellow extending from the feet to the distal end of the tarsus.

A few juvenile and immature Little Egrets are pale-legged (usually light green, but also brown-green to yellow) and in this respect strongly recall some Western Reef Egrets (Alibone 1981; Sueur 1982; Yésou 1984; Cope & Cayford 1988).

Lores

The skin on the lores of the Western Reef Egret is basically yellowish to greenish-

yellow, sometimes greenish to olive-green or bluish-green, turning pale yellow (or even more briefly red) for a short period during mating (Cramp & Simmons 1977; Hancock & Elliott 1978; Hancock 1984; Parasharya & Naik 1987). Little Egrets usually have greyish lores, which turn bright during courtship: either orange to reddish, or bluish-rose to lilac-rose, according to the terminology used respectively by Voisin (1977) and O. Pineau (*in litt.*), who studied the same population in Camargue.

Hancock & Elliott (1978) considered that the grey lores of Little Egrets were a distinction worth mentioning between the two species, and this has been repeated in recent identification literature (e.g. Lewington *et al.* 1991). Unfortunately, the situation is not so straightforward. A greenish or bluish tinge is sometimes visible on the facial skin of Little Egret, which also, even if rarely, can be yellowish (Lewington *et al.* 1991; pers. obs.). More importantly, non-breeding *schistacea* commonly have greyish lores and, among hundreds of non-breeding *gularis* examined carefully in West Africa at all times of the year, almost all had greyish, often blue-grey, lores and were indistinguishable from Little Egrets on this character: only a tiny minority of non-breeding *gularis* in fact shows yellow lores.

Dark Little Egrets

Dark Little Egrets have been claimed since the last century (e.g. Berlioz 1949; Mock 1980), but their occurrence is so rare and the given proof so scanty that the reality of their existence has repeatedly been questioned since Payne (1979) considered that the dark egrets seen in southern France, Sicily and Hungary probably referred to *E. gularis*.

Only three specimens have been traced in museum collections (Yésou & CHN 1986; Voisin 1991). One collected in 1956 in southern Spain (Bernis 1956) and discussed below is in fact either a hybrid *garzetta* × *gularis* or a pure *gularis*. Another, caught in Hungary in 1964, was identified as a Little Egret 'of African origin' (Fábián & Sterbetz 1964-65): its measurements, however, make clear that it is a Western Reef Egret (Yésou & CHN 1986; Voisin 1991). Only the third specimen, collected in Bulgaria before 1876, possibly in 1869, and housed in the Natural History Museum of Cobourg, Germany, may be a true Little Egret from the photograph published (von Boetticher 1952) and the measurements given (Voisin 1991), which agree only with *garzetta* or *schistacea*, while the bill shape is not in favour of the latter race. Furthermore, it had a grey body but white head, neck and wings (Rivoire 1956), which would be an odd combination for a Western Reef Egret.

Sight records of claimed dark Little Egrets have also been published, most of them listed by Yésou & CHN (1986), Grussu & Poddesu (1989) and Grussu (1993): the descriptions have not always allowed a precise identification, however, or have been reinterpreted in favour of Western Reef Egret.

For these reasons, and also because no dark offspring had then been reported from the heronries where many young Little Egrets have been handled for ringing or biological study, particularly in Spain and France, the existence of a dark morph of the Little Egret has been considered doubtful (Yésou & CHN 1986; Grussu & Poddesu 1989), at least before the measurements of the Cobourg specimen were known. Its existence is still considered doubtful by Grussu (1993)

and, once she had examined the Cobourg specimen, Voisin (1991) nevertheless concluded that 'further specimens are needed to be quite sure that [such a dark morph] does, in fact, occur'.

There was a new development in July 1991 when, in the course of a monitoring scheme of Little Egrets breeding in Camargue, France, O. Pineau (*in litt.*) and his colleagues found a uniformly pale grey nestling, together with three white ones, in the nest of a white pair. The grey offspring was similar in proportions to young Little Egrets of the same age. In 1992 and 1993, this ringed grey individual was observed in Camargue again, and its colour led the unwary to confuse it with a Grey Heron. In July 1992, another uniformly grey juvenile, born of unknown parents, was found in Camargue, in another colony, where in 1993 a slaty-grey egret identified as *gularis* bred with a white mate and had three young which looked white at a distance (O. Pineau *in litt.*).

Ashkenazi (1993) then reported on the existence of rare dark Little Egrets, this time in Israel, where up to seven different dark individuals were found in one year among the population numbering 3,000 in the Huleh Valley, thus accounting for about 0.2% of the local population. Their plumage was described as 'variable from light grey to almost black and from uniform cover to small dark patches without bilateral symmetry', with no further detail. The fact that only Western Reef Egrets of the race *schistacea* occur in the area should theoretically allow an easy separation of the two species on their silhouette, and particularly the shape of their bill and neck. Unfortunately, the identification process appears also to have referred to other features, such as bare-part coloration and behaviour, which are not so reliable as Ashkenazi thought: on this basis, confirmation is needed that no stray Western Reef Egret has been included within the records of Huleh Valley dark-morph Little Egrets, and proper, more detailed descriptions would be welcome in order to establish accurately the range of plumage darkness shown by Israeli *garzetta*.

In France and Spain, too, and particularly in Camargue, a few dark individuals, similar to the Little Egret in general silhouette and bill shape, have been observed in recent years. Some were almost entirely pale grey, while others were 'pied', with a plumage resembling that of intermediate *schistacea*: wings and back pale grey, neck and head a paler grey or white, belly off-white to white. One such individual frequented a colony in 1988 and another bred near Camargue in 1992 (O. Pineau *in litt.*). These birds are surely not *schistacea*, which always shows a distinctive silhouette owing to its bulkier body, shorter legs, more serpentine neck, broader curved bill, or at least a combination of some of these characters. They probably are not *gularis* either, as, although this subspecies sometimes looks very much like *garzetta* in silhouette, it rarely shows this kind of plumage. These observations thus suggest the existence of a very rare dark (actually pale grey, either uniform or pied) morph among West European Little Egrets.

Discussion

A dark adult female egret in breeding condition was collected in June 1956 in a colony in the Guadalquivir, southern Spain, where one or two other similarly plumaged birds were seen in the same period. Identified as a Western Reef Egret

by Sáez-Royuela & Valverde (1956), the individual collected was thought to be a Little Egret by Bernis (1956), who, however, later changed his opinion (Bernis 1971): its measurements agree with those of both *garzetta* and *gularis*, although more in favour of the latter. Also, the colour of its bill points to a Western Reef Egret. Thus it was reidentified as either a hybrid *garzetta* × *gularis*, or possibly a pure *gularis*. Two dark individuals were seen again in the Guadalquivir in June 1970: one was collected and shown to be *gularis* (Hiraldó Cano 1971). Meanwhile, dark egrets were breeding in the same area in 1960 and 1962 (Mertens 1961; Fábíán & Sterbetz 1964-65). In 1988, ornithologists from the University of Sevilla observed eight dark egrets in colonies at Coria del Rio, south of Sevilla, Spain, including at least one dark pair which produced a grey young showing the typical white wing-patches of the Western Reef Egret (O. Pineau *in litt.*).

In Camargue, a grey egret was paired with a white one in 1958, producing two grey young (Fábíán & Sterbetz 1964-65). One slaty-grey egret, whose identification as *gularis* was agreed upon by the French rarities committee, has been observed there every spring and summer since 1987; it possibly bred in 1990 and certainly did in 1992.

These repeated observations of proved or suspected Western Reef Egrets in colonies of Little Egrets give credit to the hypothesis that some *gularis* may have occasionally interbred with *garzetta* (Bernis 1971). The presence of a grey young in the nest of apparently typical Little Egrets may then be the expression of hybrid lineage. This, however, remains speculative: the frequency of pied or pale grey 'Little Egrets' seen in France in recent years is probably too high in relation to the very low possible occurrence of mixed pairing between Little and stray Western Reef Egrets, thus suggesting that at least some of these odd-coloured birds are not hybrids but pure *garzetta*, and that the occasional appearance of dark Little Egrets is not limited to one colony in Israel.

The laconic description of Israeli birds suggests that melanism could be even more marked in this species than shown by the grey and pied individuals observed in France: the possibility of a really dark Little Egret would further complicate the identification of any out-of-place dark egret. Were the existence of hybrids to be proved, it would similarly complicate the matter.

In any case, when identifying a dark egret, the greatest attention must be given to the structure of the bird, particularly the shape of its neck, the shape and size of its bill, and the proportions of its legs. The structure of *schistacea* always allows the identification of this well-differentiated form, which is as different from the other two as are many bird species. Structure is also often greatly helpful in separating *gularis*, even if individuals of this race can be close to *garzetta* in many respects, especially in silhouette. Bare-parts coloration is also important, although this mostly helps identification of adults, since young Little Egrets occasionally show the same bare-parts colour as Western Reef Egrets.

Conversely, a white *gularis* can sometimes be very difficult to assess, since some individuals are very similar to Little Egrets in structure and in colour of bare parts. We can only hope that further research will help overcome this difficulty. Further information from the colonies where pied or grey egrets breed or are reared in southern Europe may help us to understand what these birds are.

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Summary

The identification of Western Reef Egrets *Egretta gularis* of the subspecies *gularis* and *schistacea* is discussed, and information is given on the occurrence of 'dark' (usually pale grey or pied, but sometimes almost black) Little Egrets *E. garzetta*. Western Reef Egrets of the race *schistacea*, although very variable in appearance, are easily separated from Little Egrets by a combination of structural characters. Many nominate *gularis* share these diagnostic characters, while others resemble the Little Egret much more, up to a point where some white individuals can be very difficult to tell from Little. A few dark Little Egrets have been found in Israel. Pale grey or pied egrets with a plumage resembling *gularis* or *schistacea*, but with a shape and structure typical of *garzetta*, have also been found in France and Spain in recent years. Some of these are probably melanistic Little Egrets rather than hybrids between Little and Western Reef Egrets, although various observations in Spain and southern France suggest that mixed pairing may occasionally occur, and be productive. The existence of rare melanistic *garzetta*, and the possibility of occasional hybridisation, further complicate the identification of any stray Western Reef Egret.

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