

Field Identification of the Black-breasted Buzzard and Square-tailed Kite

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Because raptors, particularly the less common species, often present identification problems, the following experiences are detailed in case they are of assistance to other observers.

On 2 May 1986 at Lake Kutjitarra in the Tirari Desert (north-eastern South Australia), FJB observed two raptors which were at first thought (wrongly as it turned out) to be Square-tailed Kites *Lophoictinia isura*. The birds were rufous with dark streaks on the head and underparts, and dark brown on the upperparts. In flight from below they appeared pale rufous with dark, almost black primaries and a broad, square tail. The wings had a prominent creamy white patch at the base of the primaries. At about 1015 h the birds were flying low (10 m) over parallel sand ridges and swales covered in Sandhill Canegrass *Zygochloa paradoxa*, *Acacia ligulata* and *Dodonaea viscosa angustissima* shrubs. Their long, upswept wings and style of flight gave them a very harrier-like appearance. They were only slightly larger in body than a Black Kite *Milvus migrans* and Whistling Kite *Haliastur sphenurus* also present, but had much longer wings. Both birds flew out of sight at 1025 h, but one returned at about 1030 h and perched on a dead tree. It had a very rufous appearance with a small crest, flesh-coloured bill and feet and dark wing tips extending past the tail tip. Although FJB was familiar with dark phase Black-breasted Buzzards *Hamirostra melanosternon*, the bird was identified as a Square-tailed Kite (a species not previously observed by him) because it was paler than other Buzzards observed, seemed too small in size, the 'bullseyes' in the wings appeared too small and not white enough, and because he had never seen Buzzards using this harrier-like style of flight. Photographs were obtained (Plate 23) and were circulated to colleagues in the South Australian Ornithological Association. Opinion was divided on the bird's identity, but it was clearly a juvenile (first-year) Black-breasted Buzzard and not a Square-tailed Kite because of the black (not barred) primaries, short unbarred tail, heavy build and robust bill and feet (evident on a photograph unsuitable for reproduction here).

SD had a similar experience at Wanaaring in north-western New South Wales in August 1978. A light-coloured Buzzard (the so-called 'light phase', which is apparently an immature plumage stage: Slater et al. 1986) was beating and gliding harrier-style low (<10 m) over shrub-covered sand dunes. It then started soaring in spirals. A second observer (P. Disher) was present, and both were familiar with the Square-tailed Kite. SD (at least) was also familiar with dark Buzzards. Nevertheless it took some time to work out that the bird was a Buzzard and not a Square-tailed Kite, mainly because of its shorter tail, unbarred flight feathers and more aquiline head and bill. G. Czechura (pers. comm.) also had a similar experience near Goondiwindi (Queensland) in December 1983, when a soaring immature was finally identified as a Buzzard because of its unbarred flight feathers, stocky build and long-winged, short-tailed appearance.

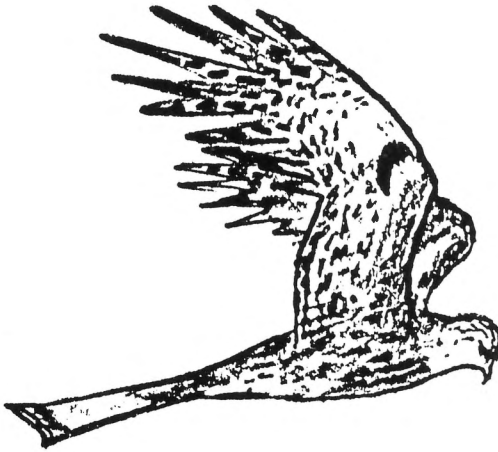


Figure 1. Characteristic hunting attitude of Square-tailed Kite, in which bird sails at low altitude with wings raised and bent back at carpals. Note prominent 'fingers' and dark 'wrist' patch.

Drawing: R. Jaensch



Figure 2. Wing shape of Square-tailed Kite (left) and Black-breasted Buzzard (right). Kite has more angled leading edge with carpals held forward, and dilated wing tip due to very long primaries. Buzzard has straighter leading edge, more even wing width (drawings somewhat exaggerated for emphasis).

Drawing: R. Jaensch

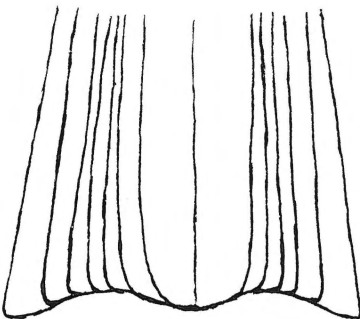


Figure 3. Tail tip of Black-breasted Buzzard and Square-tailed Kite (fresh plumage). In both species, tail almost square with slightly longer central and outermost rectrices.

Drawing: S. Debus

Although most field guides have mentioned the similarity of the Black-breasted Buzzard and Square-tailed Kite, only Cupper & Cupper (1981) and Hollands (1984) have stressed this sufficiently. Their photographs demonstrate the very strong similarity particularly between juveniles of these species. Conversely, some guides have understated the differences between the Black and Square-tailed Kites. It is apparent that Black Kites showing a spread tail are sometimes mistaken for Square-tailed Kites but a genuine Square-tailed Kite, once seen, is clearly quite different from the Black Kite in behaviour and ecology. It seems pertinent to review some of the more useful field characters of the Buzzard and Square-tailed Kite and some of the pitfalls in separating them from similar species. This is drawn from our field experience, supplemented by that of R. Jaensch and G. Czechura (pers. comm.), and largely corroborates information already available in the literature.

The most obvious differences between the Square-tailed Kite and light or juvenile Buzzards are in bodily proportions. The Buzzard is more robust with broader wings, shorter tail and larger bill and feet. The Square-tailed Kite has proportionally longer primaries than all similar species, producing a wing that is wider in the distal (primary) section than the base (secondary section). In the Buzzard the distal and proximal sections of the wing are more similar in width (R. Jaensch). The Square-tailed Kite is a more slender, rangy-looking bird which lacks the strong contrast in tail/wing length of the more aquiline Buzzard (G. Czechura). There are also some differences in wing carriage. Although both species may soar and sail with a dihedral from bowed or 'kinked' to more smoothly upcurved, the Square-tailed Kite often glides with the primaries swept back (though widely splayed) and the carpals carried well forward whereas the Buzzard's wing is less curved along the leading edge (see Figures 1 and 2). Different flight mannerisms include the Buzzard's more frequent rocking or tilting from side to side when soaring or gliding, and the Square-tailed Kite's frequent tail-twisting. The Buzzard tends to soar higher, but there are other reports of low beating and gliding flight (Brooker & Wombey 1980). G. Czechura has also observed a Buzzard flying at 10-15 m in a straight line, intently watching the ground, over at least 200-300 m. Note that in both species the pale 'bullseye' may be visible in the upper surface of the wing, and that the wing tips extend well beyond the tail tip when perched. In fresh plumage the two species also have a similar tail-tip configuration: slightly forked but with projecting central tail feathers (Figure 3).

Dark-plumaged Buzzards are very distinctive in flight, but from below and behind the Buzzard and adult Wedge-tailed Eagle *Aquila audax* are easily confused unless the tail shape is noted. Buzzards also perform an undulating advertisement display like the Wedge-tailed Eagle's 'pot hooks' display — a series of dives and upward sweeps without wing-beating or calling (SD). Many false reports of 'Buzzards' appear referable to Wedge-tailed Eagles with some white in the under-wings, a similarity heightened by the slightly bowed dihedral of both species when soaring (G. Czechura).

The Buzzard is said to be larger than most other Australian raptors, approaching the Wedge-tailed Eagle in size. In fact in body it is scarcely bigger than a large female Little Eagle *Hieraetus morphnoides*: two male Buzzards weighed 1150 g (Price-Jones 1983) and 1242 g (South Australian Museum) and the species is apparently weakly sexually dimorphic in size (Hollands 1984). However, the Buzzard has larger wings than for instance Black and Whistling Kites, both in length (chord: cf. Brown & Amadon 1968, Baker-Gabb 1984) and in relative expansion from body to carpals (SD pers. obs.); this produces a greater wingspan (1.56 m cf. 1.3-1.4 m: Price-Jones 1983) and heightens the impression of greater size. It may also create a stronger impression of long wings and short tail than in the other kites (G. Czechura, cf. photographs in Hollands 1984).



First-year Black-breasted Buzzard, Lake Kutjitarra, South Australia, 2 May 1986. Note short tail, black 'fingers', wing shape.

Plate 23

Photo: F.J. Badman



First-year Square-tailed Kite, between Ruby Plains and Billiluna, Western Australia, 30 August 1986. Note long tail, barred 'fingers', dark carpal patch, wing shape.

Plate 24

Photo: R. Jaensch

The most obvious differences between the Black Kite and Square-tailed Kite are in habits and flight behaviour. The Square-tailed Kite is not a social scavenger but is a solitary, active (though slow and methodical) hunter of live prey in the vegetation canopy. It courses or circles on very long, deeply 'fingered', raised wings that are more backswept than in the Black Kite. It very seldom flaps its wings. Note that on occasions (e.g. when rising sharply or changing direction), the Black Kite may momentarily show a dihedral. However, it has black (not barred) 'fingers'. The Square-tailed Kite has a dark carpal patch on the under-wing, and the white head of an approaching adult can be obvious even at some distance in strong light (G. Czechura). Plumage features can be unreliable unless good views are obtained and one is aware of the traps that can lead to misidentification. Note that the Black Kite can show a square tail, a pale (though not white) face and forehead and a diffuse pale area on the inner primaries (undersurface only), whereas the Square-tailed Kite can have a forked tail, dark eye, indistinct 'bullseyes' in the wing and may lack the white cap and face. Its long wings crossing below the tail tip at rest can create the illusion of a deeply forked tail.

Little Eagles are sometimes mistaken for Square-tailed Kites, but are more heavily built and compact, with shorter primaries and a neater under-wing pattern. On the



Black Kite *Milvus migrans*

Plate 25

Photo: David Hollands

rare occasions when the Square-tailed Kite flaps its wings, its wing action is rather loose and shallow, slower and smoother than the 'rowing' action of the Black and Whistling Kites or the powerful action of the Buzzard and Little Eagle. In an oblique view from behind, a high-soaring Square-tailed Kite can be mistaken for a Wedge-tailed Eagle unless the tail is carefully scrutinised, a possibility heightened by the Kite's very wide wingspread. Although the Square-tailed Kite is similar in body size to the other kites, it has longer wings (chord: cf. Brown & Amadon 1968, Baker-Gabb 1984) and greater expansion at the carpals (SD pers. obs.), producing a greater wingspan (up to 1.6 m: Price-Jones 1983). When quartering grass or other low vegetation the Square-tailed Kite can appear harrier-like, due to its buoyant flight and agility at low altitude rather than to any particular harrier-like physical appearance (G. Czechura).

Some of the reports in the literature on the Black-breasted Buzzard and Square-tailed Kite are suspect. For instance, Keartland (in North 1912) claimed to have counted 57 Buzzards on the ground at once in north-western Australia. This report may involve misidentified birds (e.g. Black Kites, Wedge-tailed Eagles) since the Buzzard's diagnostic features are much less evident at rest. From what is known of the Buzzard's ecology (e.g. Cupper & Cupper 1981, Hollands 1984) it is highly unlikely that it is sociable or that it was ever numerous enough to gather in large flocks: it is a large, active hunter that seldom eats carrion and apparently occurs at low density. For instance FJB found three nesting pairs along c. 10 km of the Cooper Creek 200-250 km upstream from Lake Kutjitarra, an exceptional density for the Lake Eyre drainage (cf. Blakers et al. 1984 and Hollands 1984, who recorded three pairs in c. 20 km and at least 8 km between nests respectively). However, it can be common at times in northern Australia and may occur in small groups (R. Jaensch, G. Ingram). The Buzzard is also said to often hunt from a perch (Schodde 1976), but its structure and flight performance (large wings, remarkable buoyancy) suggest sustained aerial searching methods (cf. Hollands 1984). It gives the impression of being a highly aerial species (SD, G. Czechura).

The Buzzard is said to utter a trisyllabic call 'ge ge wick' (McGilp 1934) but this sounds like a Little Eagle, the dark morph of which can be mistaken for a Buzzard. In our experience the Buzzard utters repeated monosyllabic yelps which may be hoarse or shrill (see also Paine 1976, Cupper & Cupper 1981, Hollands 1984). The Buzzard is also said to utter harsh screeches when attacking prey (Schodde 1976, quoting McGilp who only said 'when attacking'), but this seems highly unlikely. SD has observed a pair of Buzzards calling insistently when attacking a pair of Australian Ravens *Corvus coronoides*, but this was clearly a case of mutual aggression near the birds' respective nest sites since the Ravens often returned the attack. The Buzzards showed remarkable speed and agility, sweeping through the tree canopy with short, stiff wingbeats, flipping over to strike upwards at the attacking Ravens, or suddenly following the attacking Raven down in a dive.

Doubt has rightly been cast on some early reports of flocks of Square-tailed Kites, but there are still reports of supposed Square-tailed Kites in numbers, with Black Kites, scavenging, or following farm machinery for flushed ground prey. All such observations almost certainly refer to the Black Kite as there is no convincing evidence that the Square-tailed Kite behaves in this manner. In fact, its diet (mainly small birds and the contents of their nests) suggests that it does not behave like the Black Kite and must necessarily occur at much lower density. In the field the two species are not difficult to separate if one ignores tail shape and concentrates on flight and wing carriage, a principle that applies to raptor identification in general: shape, proportions and flight behaviour (the way a bird holds and flaps its wings) are often more diagnostic than minor plumage details.

There is a need for further reliable observations on the behaviour and ecology of the Black-breasted Buzzard and Square-tailed Kite. Now that excellent books of colour photographs are available, it should be easier for observers to learn the birds' characteristics and thus correctly identify them and others with which they might be confused.

Acknowledgements

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