

FURTHER COMMENTS ON THE SQUARE-TAILED KITE IN SOUTH AUSTRALIA.

Following an analysis of the distribution and status of the Square-tailed Kite *Lophoictinia isura* in South Australia (Debus 1991), additional information has become available. Records are dealt with in the same sequence as in the earlier paper.

1. Record 5 of Debus (1991). I have not been able to trace the specimen from Eyre Peninsula referred to by Condon (1969), and a personal visit confirmed that it is not in the Western Australian Museum. However, there is a clutch of egg(s) in the Queensland Museum (QM O.21336) collected at Clare, central-eastern Eyre Peninsula, on 9 October 1965. This record reinforces the former importance of the peninsula as a breeding locality of the species.

2. Adelaide district (record 13 of Debus 1991). There is an additional record from the Bird of Prey Watch scheme. E. Birt observed a Square-tailed Kite on the Sturt Highway south of Kapunda, on 22 March 1990. The description on the data sheet (sighted) is adequate, and the record was accepted by the coordinator (D. Baker-Gabb), who annotated the sheet: 'unusual, but observer is very experienced – accept'. This record reinforces the importance of

coastal and subcoastal south-eastern parts of the state for the species.

3. Record 32 of Debus (1991). This record of a supposed immature Square-tailed Kite at the Strzelecki Crossing, on 28 November 1985, was identified by several ornithologists from colour transparencies which seemed to show *Lophoictinia* characters (two of these reproduced as Figures 4 and 5 of Debus 1991). However, the photos exaggerated its likeness to a Square-tailed Kite, and a reappraisal is necessary. In the crucial photo the bird was 'stretched' in critical aspects of its anatomy and its markings blurred by camera movement (Figure 4). Thus it seemed to have dilated wing-tips and a long, pale bill. The other photo (Figure 5) has frozen the bird's wing attitude in an apparently modified (arched) dihedral. The bird appeared brightly marked, with pale head, pale 'windows' in the wings, dark carpal patches on the underwings, and a shallowly forked tail (even when half-spread) with a dark terminal band. Recent examination of known-age Square-tailed Kite specimens confirmed that juveniles of this species have obscure 'windows' in the wings and obscurely barred primaries. However, barring on the tail varies from complete on the

central feathers to virtually nil on the outer feathers [unlike the fully barred tail in Figure 4 of Debus (1991); compare Plate 24 of Badman and Debus (1987), which shows a first-year Square-tailed Kite moulting into second-year plumage]. The dark carpal patches on the underwings of the Black Kite *Milvus migrans* are large and diffuse, and ovate (as in the photos in Debus 1991), not crescent- or comma-shaped like those on the Square-tailed Kite. Furthermore, the Black Kite can momentarily show a dihedral or wings arched above the plane of the body (pers. obs.). The important point is that raptor field identification does not depend on a frozen image or on minor plumage details but primarily on the shape, wing attitude and flight behaviour of a moving bird. Given the above, the bird in the photos may have been an unusually brightly marked juvenile Black Kite and therefore the record should be treated as unconfirmed.

4. Record 35 of Debus (1991). I have since sighted the relevant Bird of Prey Watch data sheet. I can confirm that the description of a Square-tailed Kite at Coongie Lakes, September/October 1988, noted all the salient points of identification and was thus acceptable.

These additions do not alter the conclusions of Debus (1991) but do emphasise the need to support records of Square-tailed Kites with detailed notes on both plumage and behaviour, including wing shape, wing attitude and flight. It is worth noting that an analysis of Queensland records (Debus and

Czechura 1992) fits the movement pattern postulated for South Australia, particularly the north-east. Also, behavioural data recently obtained in New South Wales (Debus *et al.* 1992) may be of relevance to the study and protection of any nests found in South Australia.

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