

Morphometrics:

Measurements below are for the nominate *Z.l. lunulata*, but ssp. *Z.l. cuneata* is a similar size:

 Adult Male
 Adult Female

 Wing:
 128 – 142 mm
 122 – 137 mm

 Tail:
 101 – 120 mm
 97 – 113 mm

 Weight:
 95 – 130 g
 106 – 125 g

Ageing:

Juveniles are patterned like adults, but the head, neck and upperparts appear more rufous and with diffuse pale centre to feathers giving a mottled appearance, rather than evenly scalloped as in adults. Underparts are also patterned like adults, but with a stronger orange-buff wash. However, the most reliable method for separation of juveniles from adults is the shape and pattern of the tips of tail feathers and secondary coverts as illustrated above;

Immatures retain all juvenile greater primary coverts (light brown suffusion to outer edges), dark brown alula, primaries and secondaries and some tail feathers. Adult plumage is attained early in the second year coinciding with adult post-breeding moult. Thus adults are (2+)

Sexing:

There is no sexual dimorphism in plumage and although some adult males may be marginally larger than females there is a large overlap in measurements; Incubation by female only.