BIRD IN THE HAND

by H. J. de S. Disney, drawings by D. Rae, Australian Museum, Sydney

"Bird in the Hand", vol. 5, no. 3 (September 1967), was the first dealing with quail; the basic differences between the two groups (family Phasianidae and family Turnicidae) were set out. The identification of the females of the Australian 'True Quail' (Phasianidae) was dealt with in vol. 5, no. 4 (December 1967). In this issue, details are given for ageing and sexing Stubble Quail.

Stubble Quail *(Coturnix pectoralis)*

Ageing

In other countries, considerable work has been done on ageing game birds, particularly quail. This has revealed that quail (and some other game birds) do not moult the outer two or three primaries in the first year until after breeding and these can therefore be used as a character to determine first year birds. However, the position is much more complex in Australia where quail may breed after good rain, even as very young birds. It is not known to what degree the stimulus into breeding may retard or advance the moult into adult plumage.

Skull ossification is used to age many species but with quail it is also not known how long ossification takes. There is evidence to suggest that ossification in Stubble Quail nears completion, except for very small "windows", in 12 months or less. The effect of early breeding stimulus may cause quail to develop more adult feather and the combined strain may delay ossification.

Wing characters are diagnostic of first year birds as the juvenile primary coverts are not renewed until the first full moult in the bird's second year.

A combination of characters is therefore necessary for correct ageing.

Sexing

Sex differences are illustrated in N. W. Cayley's *What Bird Is That?*, plate xxxvii. The pale rufous colour on the throat of the male is diagnostic and, at least, is partly discernible at a very early age. Almost certainly this would be evident by the time the birds are large enough to be banded.

Summary

The wing characters are the best indications of age. The body moult can be either advanced or retarded, and a bird may have full adult wings and coverts, while the breast feathers are still immature and worn.

MALE

Juvenile. Less than 4 months old.

Breast: Whitish buff feathers of loose texture with 2 or 4 brown spots on each side of the shaft.

Wing: Primaries nos. 1-7 with buff edges and tips, the innermost (no. 1 etc.) moult immediately into first year feathers, nos. 5-7 pointed, nos. 8-10 still emerging.

Primary Coverts dark brown, tipped and edged buff, tip rounded, shaft white forming well marked white line; outer two less buff and more like adult.

Immature. This plumage is usually reached by 4 months.

Breast: No full black feathers on breast, the feathers are half black and half white. (Adult breast plumage is sometimes assumed direct from the juvenile plumage).

Wing: Primaries nos. 1-6 new, no buff edges and ends blunt, squarish and much broader than juvenile primaries. No. 7 is often still juvenile, but may be renewed with the others. Juvenile nos. 8-10 are fully emerged and grading to pointed tips; these are not moulted during the first year.

Primary Coverts are still juvenile with the tips buff and slightly pointed.

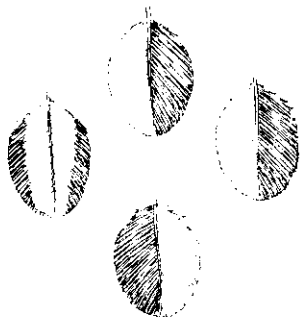
If conditions are suitable, birds may breed in this plumage at 4 months or later. In addition, before the main breeding season, the birds may do a further partial moult into adult type breast feathers; no. 7 juvenile primary, if still unmoulted, will be renewed. All primary coverts are still juvenile.

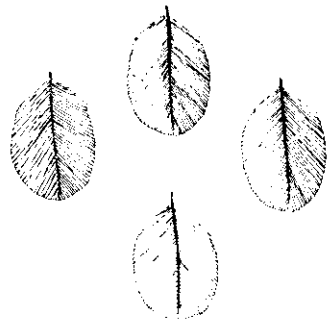
Adult

Breast: A well marked black patch in the centre of the breast with full black feathers and full black streaks on the sides of the belly. (This stage may be assumed before the normal breeding season and possibly even directly from the juvenile plumage).

Wing: A bird moulting into second year plumage will have Primaries nos. 1-7 similar to immature; nos. 8-10 more cut off and rounded and not gradually tapering to a point. However, with wear, both types of feathers can look very similar.

Primary Coverts dark grey (later becoming brown) with dark shafts. The tips are square with no buff or very slight buff in the form of a V in the tip.





• **UPPER CENTRAL BREAST FEATHERS**

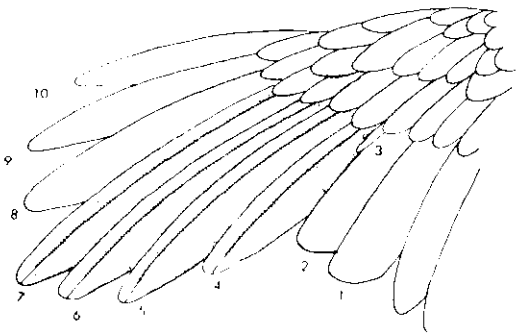
Juvenile: above left.

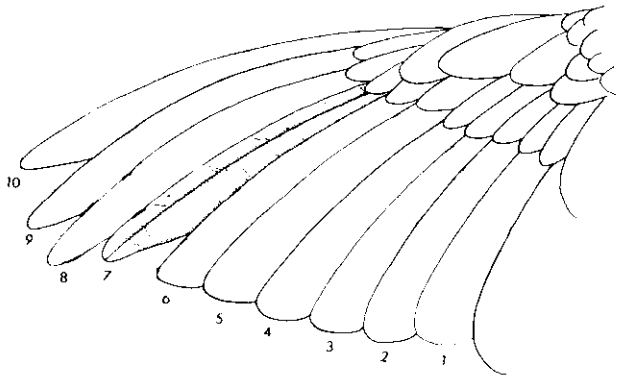
Immature Male: above centre.

Adult Male: above right.

Immature Female: left.

Adult Female: right.





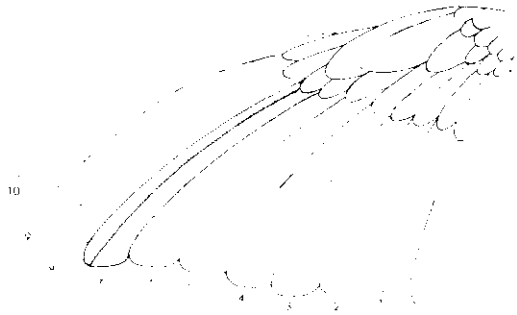
- **WINGS**

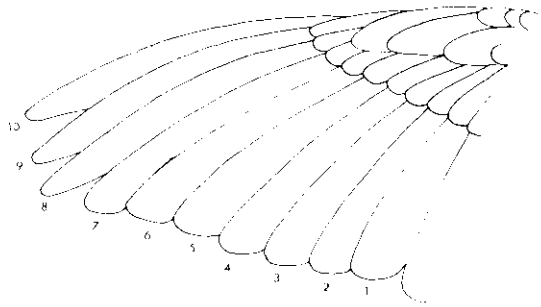
Juvenile (above left): Primaries nos. 1-3 already moulted and new immature feathers emerging; nos. 4-7 juvenile; nos. 8-10 juvenile and still emerging.

Immature (above right): Primaries nos. 1-6 new; no. 7 juvenile; nos. 8-10 juvenile.

Immature (below left): Primaries nos. 1-7 new; nos. 8-10 juvenile.

Adult (below right): Primaries all renewed.





FEMALE

Juvenile. Less than 4 months old.

Breast and Wing: Similar to male.

Immature

Breast: Dark brown lines on the feathers usually more as streaks, and well separated by white area from the central shaft; brown markings sometimes are in the form of round spots.

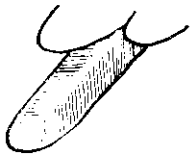
Wing: Similar to male.

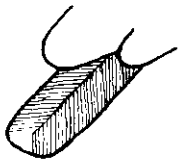
Adult

Breast: Brown marks on the feathers of the centre of the breast form crescents, which touch, or nearly touch, the centre shaft, so that the effect is more towards crescents and spots than streaks.

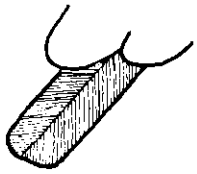
Wing: Similar to male.

This stage may be assumed before the normal breeding season and sometimes direct from juvenile plumage. On the other hand, it may be delayed and not take place until after the wing has completed the moult into full adult primaries and primary coverts.





- **PRIMARY COVERTS**

Juvenile: above left.

Adult: above right and right.