

## FURTHER NOTES ON THE LITTLE QUAIL

By JOHN ECKERT

The recent article on the Little Quail (*Turnix velox*) by D. N. Kraehenbuehl (*S.A. Orn.*, 1970, 25, 207-8) contains some allusions to the status of the species in the southern settled areas of South Australia which I consider are misleading. Since 1962 I have kept records of the arrival dates, plus some notes on the breeding and seasonal abundance of the Little Quail in the Strathalbyn district (which refers roughly to the Strathalbyn District Council area, including Milang, Finnis, Ashbourne, Hartley and Langhorne Creek), the results of which seem to answer some of the queries posed by Mr. Kraehenbuehl.

The Little Quail is a spring and summer visitor to southern districts, where its favourite habitat is standing cereal crops. I consider it especially prefers crops growing on light, sandy or red soils. By virtue of their occupation therefore, farmers have a much greater opportunity to see the species than most other observers, birds usually being seen when flushed from the crop during mowing or harvesting operations. When a paddock is mown, a fairly exact estimation of the number of birds present is obtained, but, as mowing is normally carried out before the arrival of the main migratory movement, large numbers are seldom seen. Birds are flushed by the header when harvesting, but it is thought that only a portion (possibly 50%) of the actual number present are seen in this way. In thin crops, birds can be seen running out of the way of the machine. When small young, and perhaps eggs, are present a bird is often flushed from the same vicinity on several successive rounds. The presence of a bird in exactly the same locality on several occasions is therefore taken as an indication of breeding.

Departure dates are not obtainable, but the majority appear to leave the district soon after harvesting is completed and stock are turned in on the stubbles, although some are still present into March. It is possible that the birds gradually move westward to Finnis and Sandergrove and other areas which are later in harvesting than the eastern side of the Strathalbyn district. I have no record of

the Little Quail in this district during the months of April to September inclusive, although it would not surprise me if some occasionally stayed on into April.

Other observers have assisted with these observations, but only those records which are considered completely reliable have been used. The majority of sightings have come from B. Eckert and myself. The area jointly farmed by us, cropping 6-700 acres annually, represents approximately 1 per cent. of the Strathalbyn District Council area. While not all the district is ideal habitat for the species, this is offset by the fact that not all birds present in a crop would be seen. The following observations could therefore be taken as representing about 1 per cent. of the total number of Little Quail present in the Strathalbyn district during a season.

1963-4. This was a splendid season for migratory bush birds, and many species e.g. Cockatiels (*Nymphicus hollandicus*), Budgerigahs (*Melopsittacus undulatus*), White-winged Trillers (*Lalage seuerii*), Rufous Songlarks (*Cinchorhamphus mathewsi*) and Wood-Swallows (*Artamus personatus* and *A. superciliosus*), were present in hundreds. The Little Quail was first seen on 6 October and during harvest was noted to be extremely numerous, favoured paddocks carrying a population of at least 1 bird per acre. Extensive breeding was noted and young were first seen on 1 November. There was a possibility that some birds were double-brooded in this season as eggs were still being laid when early young were beginning to fly. Population estimate (our farms): 500-800.

1964-5. A single bird was seen at 'Nappayalla,' Langhorne Creek on 14 November and another at Belvidere on 30 November. These were the only two records and breeding was not noted. Population estimate: 2-4.

1965-6. A single bird was seen on two occasions, 19 October and 13 November, in almost exactly the same spot in crop at Belvidere. Although these were the only two records there is a strong possibility that breeding took place. Population estimate: 2-4.

1966-7. First seen at Belvidere on October 19 and moderate numbers present later, five adults and several fluttering juveniles being seen in a 50-acre paddock on 'Nappyalla' on 15 November. Population estimate: 50-100.

1967-8. First seen on October 12 when L. Potts saw one in his Langhorne Creek vineyard at 7 a.m. and R. Cleggett saw another two miles east of Langhorne Creek in grass at 11.30 a.m. Moderate numbers were again present this season and breeding was noted. Population estimate: 50-100. Several Little Quail were seen at Wauraltee, Yorke Peninsula on 28 December in barley stubble.

1968-9. A pair seen near Langhorne Creek by R. Cleggett on 2 October was the first record. Within a few days the species was numerous, and widespread breeding was later evident, juveniles being plentiful during November. Numbers this season were not noticeably in excess of those of 1963-4. Population estimate: 500-800. Little Quail were also numerous on Sturtvale and Lilydale on October 12-13 in spear grass.

1969-70. First seen near Langhorne Creek by R. Cleggett on 6 October and single birds at 'Nappyalla' on 7 and 8 October. Apparently a wave of birds passed through at this time, for the only other record for the season was a single bird at 'Nappyalla' on 25 October. Population estimate: 3-6.

1970-1. First seen at Belvidere on 30 October by B. Eckert. Breeding probably took from the same spot on 28 November. Two birds were noted at 'Nappyalla' during late November but the species was uncommon this season. Population estimate: 4.

1971-2. Three were seen at Belvidere on 20 October, and thereafter the birds were present in moderate numbers. Breeding occurred, fluttering young being seen from 24 November until late December. Population estimate: 50-100.

From the foregoing it is apparent that the Little Quail is actually an annual migrant to the Strathalbyn district but in numbers which fluctuate violently from season to season. Peaks, *i.e.* densities of at least one bird to two acres, have occurred in 1955-6, 1963-4 and 1968-9. I consider its status similar to that of the Budgerygah, which is also an annual migrant in similarly fluctuating numbers, whereas some other migrants, *e.g.* Cockatiel, Rainbow-Bird

(*Merops ornatus*), annually return in much more stable numbers. The Little Quail should not be compared with the Crimson Chat (*Ephthianura tricolor*) which is only a sporadic visitor to southern areas even though it occasionally occurs in vast numbers.

The Little Quail in southern areas are therefore not stragglers but constitute the southern portion of normal migratory movement. Apparently Strathalbyn district is one of the furthest south to receive annual visits, but lack of observers in other areas may give a false indication of the species' status there. Although records from the South-East of the State are rare, it has been recorded from Portland in nearby Victoria on occasions (N. F. Learmonth, 1966, *Birds of Portland District*) which is still further south; so in years of abundance one could expect the species to occur in almost any part of mainland South Australia. Evidence shows that in some years Little Quail winter in the interior of the State, but at present I would surmise that the annual migratory movement of the species would be similar to that of the Budgerygah, with the majority of birds wintering in the northern parts of Australia.

The Little Quail, through its preference for sheltering in cereal crops while in the south, is apparently overlooked by most observers except in those years when the density of the population forces some of the birds to overflow into more accessible places. Yet, in the pastoral country, the observer is constantly moving through suitable habitat for the species, and so it is much more likely to be observed. This may have caused the erroneous belief that the species is only a straggler to southern settled areas, when, in reality, it is a normal annual migrant, in far greater numbers than most people realise. If my estimations are near correct, then the number annually visiting Strathalbyn district has varied between 200 and 50,000 to 80,000 over nine seasons. Even in the unlikely event of my estimates being ten times too great, the number is still considerably in excess of that indicated by Kraehenbuehl's remarks or perhaps implied by Condon's *Handlist* (1969), and this for but one district. I consider that the strip of country between Pinnaroo and Taillem Bend, the plains from Mannum south to Hartley and the country between Pt. Broughton and Pt. Victoria might be just as suitable for Little Quail as the Strathalbyn

district. If so, then the total number present in agricultural areas in peak seasons must be immense.

[Mr. E. F. Boehm tells me the following about the density of Little Quail in the Mt. Mary Plains (an area about ninety miles north-north-west of Langhorne Creek, where little cereal-growing is now done because of the low average rainfall):— “My experience with Little Quail has been that populations fluctuate steeply from season to season according to the available supply of cover and food. A density ranging from two birds to 5,000 birds per 1,000 acres is quite conceivable in my area. It applies equally to cereal crops and to tall dense grass such as

spear grass and wallaby grass. During the spring of 1971 the density was about 100 birds per 1,000 acres of natural pasture.”

Mr. M. H. Waterman tells me that in the Adelaide Plains, between the Gawler River and Wild Horse Plains, he and his helpers have trapped just over 100 Little Quail in the four seasons since 1968. He has trapped them from December until as late as 10 May. In each season, the ratio of Little Quail to Stubble Quail that he has caught has been only a few per cent., and he therefore concludes that the Little Quail is decidedly scarce. The quail are caught with vehicles and spot-lights, in paddocks of stubble and summer-grass. EDITOR.]