

SHORT NOTES

HELPERS AND SCROUNGERS AT STARLING NESTS

At Belmont (41°10'S 174°54'E) near Lower Hutt, a study of about 400 pairs of Starlings (*Sturnus vulgaris*) began in 1970. 500 nest boxes are arranged in groups about 100 m apart, with 10 or 15 boxes 2-3 m apart in each group. The boxes are on old concrete buildings in the middle of a 1500 ha sheep farm, with very few natural nest sites available within 3 km. All fledglings from the area are banded and carry a colour band to indicate the year they hatched. Practically all adult females, and a few males, are individually colour banded. First clutches are laid from mid-October, and second clutches in early December.

Starling chicks calling in the nest often attract passing adults, especially towards the end of the breeding season when many have no young of their own to look after. Thus, on 26 December 1977 while I was watching from a hide 5 m away, four or five adults in addition to the parents entered a nest box singly between 1800 and 1900 hrs and spent 2-3 minutes inside before flying off. These included a five-year-old male, a one-year-old female which had nested 20 m away earlier in the season, and three visits from at least two (probably three) different unbanded males. None of the visitors fed the nestlings, then nine days old, and the parents showed little aggression towards these strangers, which were allowed to perch 1-2 m from the box. Remarkably, no adult strangers visited this nest box in 17 other hours of observation spread over eight days, from 24 December 1977 to 7 January 1978.

The commonest visitors are young males, which do not normally breed in their first year (Kessel 1957). In the past eight years I have seen at least 30 banded first-year males entering nest boxes containing chicks, at various times during the breeding season. Like De Haven and Guarino (1970), I have not noticed these males helping or hindering in any way, although some have been reported to brood the young (Kluijver 1938), and carry nesting material or food (Schuz 1943; Wallraff 1953). Kluijver (1933) suspected that they might also remove eggs.

Schantz (unpubl. 1938, MS quoted by Kessel 1957) also noted that early-fledged juvenile starlings visited and entered the box while other nestlings were still there. Warden (1975) watched a juvenile from the first brood enter a box and be fed by the parents who were feeding a second brood. He assumed that the juvenile then fed the nestlings, but Johnson and Cowan (1974) suggested a more sinister role: "Often fledgling starlings from other nests parasitised nest cavities already occupied by less developed nestlings. In some instances these

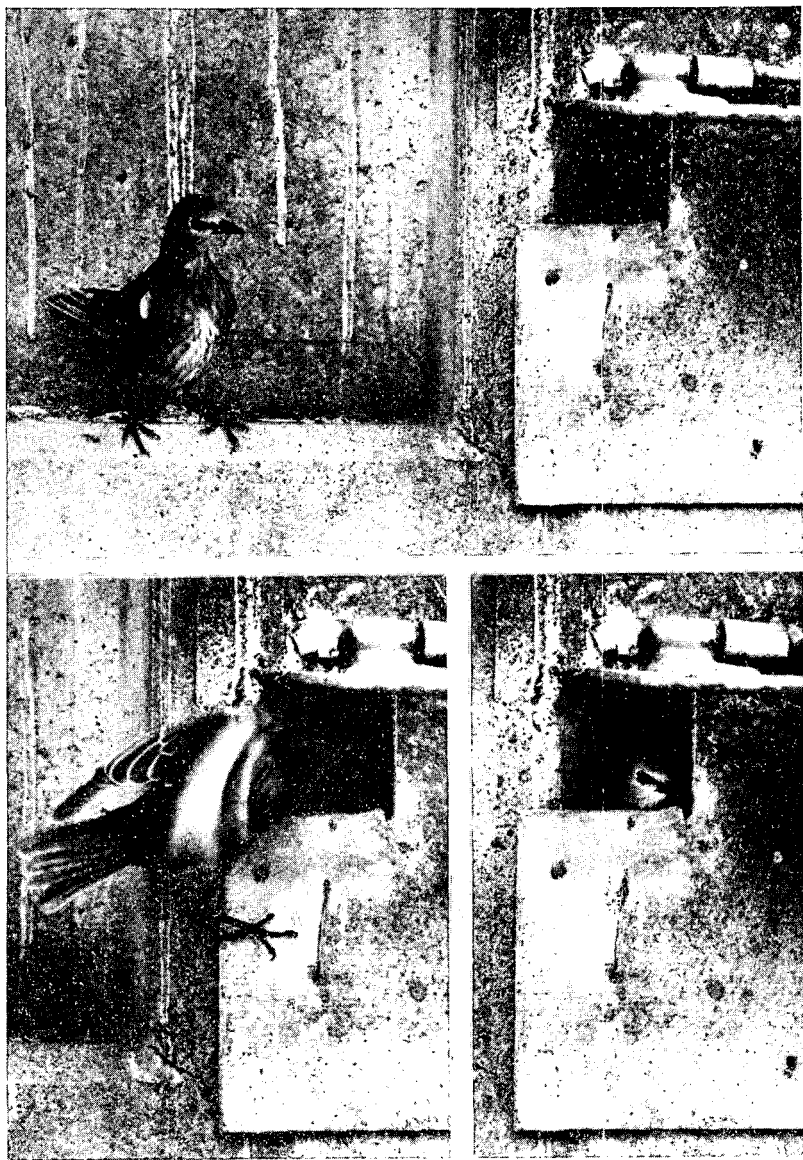


FIGURE 1 — First-brood juvenile Starling (note single dark feather on breast) at nest box containing 3 second-brood chicks 19 days old on 5 January 1978. Top: looking around cautiously after being chased off once by adults. Left: entering box. Right: waiting at entrance to be fed.

nest parasites actually consumed most of the food brought by the parent birds, which resulted in death of the original brood." At 0900 hrs on 5 January 1978 such a juvenile arrived at the nest box, and, although vigorously chased by the parents, returned and entered a few minutes later (Fig. 1). It took up a position at the entrance, but the resident chicks, now 19 days old, attacked from the rear and bundled it out. The same juvenile (unbanded, so not from a local nest box, but recognisable by the single feather of the autumn plumage on its breast) returned almost at once and repeated its entry and ignominious exit. Neither parent arrived with food while the scrounger was at the entrance, but it might well have been fed if the nestlings had been smaller. Similar well-fledged juvenile strangers were seen trying to enter other occupied boxes on 10 and 26 December 1977 but were chased off by the adults. Scrounging may be more effective at isolated, dark nest sites than in my nest boxes, and its incidence in different populations and its evolutionary implications would be a fascinating study.

LITERATURE CITED

- DE HAVEN, R. W.; GUARINO, J. L. 1970. Breeding of starlings using nest-boxes at Denver, Colorado. *Colorado Field Ornithologist* No. 8: 10 pp.
- JOHNSON, S. R.; COWAN, I. M. 1974. Thermal adaptation as a factor affecting colonizing success of introduced Sturnidae (Aves) in North America. *Canadian Journal of Zoology* 52: 1559-1576.
- KESSEL, B. 1957. A study of the breeding biology of the European starling (*Sturnus vulgaris* L.) in North America. *The American Midland Naturalist* 58: 257-331.
- KLUIJVER, H. N. 1933. Bijdrage tot de Biologie en de Ecologie van den Spreeuw (*Sturnus vulgaris vulgaris* L.) gedurende zijn voortplantingstijd. Versl. en Meded. Plantenziektenkundigen Dienst te Wageningen 69: 1-145.
- KLUIJVER, H. N. 1938. Over spreeuwen in een dennerbeplanting. *Limosa* 11: 92-97.
- SCHUZ, E. 1943. Brutbiologische Beobachtungen an Staren 1943 in der Vogelwarte Rossitten. *Journal für Ornithologie* 91: 338-405.
- WALLRAFF, H. G. 1953. Beobachtungen zur Brutbiologie des Stares (*Sturnus v. vulgaris* L.) in Nürnberg. *Journal für Ornithologie* 94: 36-67.
- WARDEN, D. 1975. Probable feeding of young starlings of second brood by fledged juvenile. *British Birds* 68: 161.

JOHN E. C. FLUX, *Ecology Division, DSIR, Private Bag, Lower Hutt*



GOLFING GULLS

Some years ago, when the only golfer in our district lived nearly 5 km away across a river, I was puzzled to find the occasional golf ball on my farm paddocks. It was only when I became a golfer and began hitting practice balls in the paddocks and not always recovering them, that I discovered that the culprits were Black-backed Gulls (*Larus dominicanus*).

Several times I have watched these gulls pick up a ball, fly about 40 m above the ground and drop it, repeating this several times. It is not uncommon to find golf balls in the stock water-troughs when I clean them out annually and I presume the gulls have dropped them there. A neighbour 1.5 km away finds balls which the gulls have carried from my practice area to his farm.

So far, the gulls have not obliged by picking up my ball on the golf course and dropping it in the hole!

W. M. JUKES, *Springhills, R.D. 6, Invercargill.*

Corrigendum:

Would members please alter the transposed captions which appeared on pages 207 and 208 of the last issue (Vol. 25, part 3; September 1978). We apologise to Mr Fox for this unfortunate error. — Ed.