



**West African Ornithological Society**  
**Société d'Ornithologie de l'Ouest**  
**Africain**



Join the WAOS and support  
the future availability of free  
pdfs on this website.

<http://malimbus.free.fr/member.htm>

If this link does not work, please copy it to your browser and try again.  
If you want to print this pdf, we suggest you begin on the next page (2) to conserve paper.

Devenez membre de la  
SOOA et soutenez la  
disponibilité future des pdfs  
gratuits sur ce site.

<http://malimbus.free.fr/adhesion.htm>

Si ce lien ne fonctionne pas, veuillez le copier pour votre navigateur et réessayer.  
Si vous souhaitez imprimer ce pdf, nous vous suggérons de commencer par la page suivante  
(2) pour économiser du papier.

CO-OPERATIVE BREEDING IN THE CHESTNUT-BELLIED STARLING SPREO PULCHER

by Roger Wilkinson

Received 8 August 1978

From March to June 1978 I found a total of thirteen occupied nests of the Chestnut-bellied Starling Spreo pulcher in the grounds of Bayero University campus, Kano, northern Nigeria. Five of these nests were predated or deserted at the egg stage and one was predated when containing well-developed chicks. Of the seven remaining nests at least one was used for two successive broods, young starlings fledging on 15 April and 1 June.

This note is confined to observations made at four of these successful nests, observations at the other nests being too casual to ascertain the type of breeding behaviour. All four are likely to represent second broods or second breeding attempts.

The first nest in which co-operative breeding was noted was sited within the structure of an old nest of the Buffalo Weaver Bubalornis albirostris located high up a Parkia tree. It was discovered on 26 May and contained an undetermined number of chicks which fledged within five days. Detailed observations on this nest amounted to only 45 minutes. Twice I saw four adult starlings at the nest; on the first occasion three of the adults entered the nest with food and on the second all four adults fed the chicks. The adults took turns in feeding, a bird only flying to the nest and entering it to feed after the previous bird had departed. On another visit seven starlings were seen in the close vicinity of the nest; one of these perched on the top of a nearby building and acted as a sentinel giving alarm calls whenever I approached too near to the nest. This behaviour may have discouraged the other birds from flying to the nest, for on this occasion only two starlings were seen to feed the young.

The second nest was built in a thorn tree and observations totalling 400 minutes were made between 24 May and the fledging of the last chick on 1 June. This was the second brood in this nest, the first brood having left the nest on 15 April. The 'sentinel' behaviour reported above was also witnessed at this nest, one starling frequently perching at the very top of a Parkia tree. A minimum of four adults (two of which were marked with colour rings) co-operated in feeding the nestlings. In addition a juvenile, recognisable by the lack of metallic green on the breast and probably from the first brood in this nest, was noted to feed the young on four separate occasions.

The third nest was built high up in a Parkia tree and when discovered on 1 June contained four well-developed nestlings. I watched it over a

single period of 62 minutes. A total of five adults was observed, and with their conspicuous behaviour and calling they succeeded in distracting my attention from the nest. Although several adults were seen to enter the nest to feed the chicks it proved impossible to determine how many individuals were involved.

A period of 40 minutes was spent observing the fourth nest which was located in a thorn tree and was inaccessible. On 2 June four adults, one acting as a sentinel, were seen near this nest. Two of them co-operated in driving off a Buffalo Weaver which landed on the nest tree, but co-operative feeding of the young was not ascertained. On one occasion a juvenile with food in its bill flew to the nest but following 'warning' calls by the sentinel it flew off without feeding the nestlings.

Co-operative breeding has previously been reported in the Superb Starling Spreo superbus (T. R. Huels in Grimes 1976) and Fischer's Starling Spreo fischeri (Miskell 1977) and should be sought in other members of this genus. Although Spreo pulcher is the only West African representative of its genus careful observations of other starlings may prove rewarding.

#### References

- Grimes, L. G. (1976) The occurrence of co-operative breeding behaviour in African birds. Ostrich, 47: 1-15
- Miskell, J. (1977) Co-operative feeding of young at the nest by Fischer's Starling Spreo fischeri. Scopus, 1: 87-88