

A pair of Serins *Serinus serinus* attacking a Magpie *Pica pica* close to their nest

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Active parental antipredator strategies in which either of the parents attacks a potential predator to defend the nest have been rarely described for cardueline finches. Here we describe how, on 10 August 1996, a pair of Serins dive-attacked a Magpie for at least 40 m. We found a Serin nest with one fledgling in the tree where the attack was observed to start. The fledgling was 20 cm from the nest and was fully grown and about to leave. The advanced age of the fledgling and the almost non-existent reneating potential of the pair (observation in mid-August) could have enhanced the reproductive value of the fledgling, making such defence beneficial to both parents and offspring.

Key words: Serin, *Serinus serinus*, nest defence, communal defence, nest predation.

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Nest defence and parental antipredator strategies, either passive or active, have been described for many different species (Martin 1992). Several studies have shown how nest predation can be markedly reduced by this parental behaviour (see Montgomerie & Weatherhead [1988] and Martin [1992] for reviews). However, in the literature there are very few descriptions of nest defence in cardueline finches, especially instances of direct aggression of the parents towards the potential predator (Newton 1972, Cramp & Perrins 1994). Here we describe one of these instances.

On 10 August 1996, in Barcelona (NE Spain), we witnessed a Magpie *Pica pica* flying away from a group of five Cypress

trees *Cupressus sempervirens*, closely followed and vigorously dive-attacked by a pair of Serins *Serinus serinus*. The Magpie flew for about 20 m, and stopped in a tree, only five metres away from our position; there the Serins still continued attacking the Magpie, with the result that in about one or two seconds it departed, again chased by the two Serins. After 20 m more all three birds disappeared in the vegetation. The Serins repeatedly uttered aggressive cries, similar to the ones used in intraspecific agonistic encounters (pers. obs.). We then inspected the group of Cypress trees, and found a Serin nest 6 m above ground and 30 cm from the main trunk, quite visible for an aerial predator. About 20 cm from

the nest we found one Serin fledgling, fully grown and about to leave the nest. A male Serin then appeared and started to give alarm calls from the top of a nearby tree, but it did not show any aggressive behaviour towards us. No other Serin fledglings were found, so we do not know whether the nest had contained other nestlings that could have been taken by the Magpie.

Magpies are typical predators of finch nests (Newton 1972), and the nest defence we observed by the pair of Serins had clearly deterred the predator and had thwarted predation of the fledgling. This is the first observation of a predation attempt that we have made in 10 years of studying Serins. Why this behaviour is not more often observed in cardueline finches may be due to the difficulty of observing acts of predation (Montgomerie & Weatherhead 1988), but may also be related to the ecological characteristics of Carduelines (e.g. their high re-nesting potential) (cf. Montgomerie & Weatherhead 1988). In this sense the fact that the fledgling was close to leaving the nest (i.e. parents had already invested a lot on their offspring), and the almost non-existent re-nesting potential of the pair (by mid-August) could have enhanced the reproductive value of the fledgling thus making defence profitable (cf. Montgomerie & Weatherhead 1988).*

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RESUM

Una parella de Gafarrons *Serinus serinus* ataquen una Garsa *Pica pica* prop del seu niu

En els fringíl·lids carduelins rarament s'han descrit comportaments antipredadors actius, en els quals els pares ataquen un predador potencial de nius per defensar els polls. En la present nota es descriu com, el 10 d'agost de 1996, una parella de Gafarrons atacà al llarg d'uns 40 m una Garsa. L'atac consistí en reiterats vols conjunts en picat, acompanyats d'una forta escridassada. A l'arbre d'on es va iniciar l'atac, es va trobar un niu amb un poll cuacurta. El poll estava situat a uns 20 cm fora del niu, i estava totalment plomat i a punt d'abandonar-lo. L'edat avançada del poll (i.e. els pares ja havien invertit molt en ell) i la data tardana en què va tenir lloc l'intent de predació (i.e. que impossibilitava una posta de reposició), haurien donat al poll un alt valor reproductiu que hauria compensat el possible risc pres pels pares en la seva defensa.

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