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SHORT NOTE

First observation of siblicide in brown skua (*Catharacta lonnbergi*) at Harmony Point, Nelson Island, Antarctica

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Sibling aggression within broods is common in some bird species (Legge 2002; Osorno & Drummond 2003; Young & Millar 2003; Drummond 2006; Gonzalez-Voyer *et al.* 2007), but rare among seabirds which typically have one or few young

Received 2 July 2008; accepted 22 October 2008 *Corresponding author (Young 2007). Although siblicidal aggression and death have frequently been recorded in south polar skua (*Catharacta maccormicki*) at high latitudes of its distribution (Young & Millar 2003; Schneider Costa & dos Santos Alves 2007), only indirect evidence of siblicide was previously reported in the congeneric brown skua (*C. lonnbergi;* Williams 1980). Here we describe aggression between two brown skua chicks



Fig. 1 Siblicidal brood fight between two brown skua chicks (*Catharacta lonnbergi*). Chick A, the aggressor, was observed in vertical position in contrast with Chick B that was lying down. Photo by Gabriel Machovsky Capuska.

at Harmony Point (62°17′S, 59°14′W), Nelson Island, South Shetland Islands, Antarctica that directly lead to siblicide.

Skuas give a characteristic "alarm call" when people enter their territory and when chicks are fighting (Young & Millar 2003). On 10 Jan 2006, we heard this alarm call during a fight between two brown skua brood mates. Age and body mass were not recorded, but the chicks were judged to be similar in size and both still had downy plumage. Fig. 1 shows the behavioural roles during the conflict: chick "A" was observed to repeatedly peck, bite, and push Chick "B". Over a period of 10 min, chick A inflicted an average of 42 blows per min on Chick B, which was in a clearly submissive posture that minimized its exposure to the blows. The ferocity of this episode was recorded on video tape and digital photos.

As described by Young & Millar (2003) for south polar skua, in our observation the dominant chick's attacks were also accompanied by the shrill call of one brown skua adult. The adult was assumed to be one of the parents of the brood mates based on previous observations. During the entire period of the fight, the adult skua did not interfere with the interaction between its chicks nor was it confrontational in response to our close presence. After approximately 3 h of combat between the brood mates, the adult stopped making its alarm sound. At this time the death of the non-aggressive chick (Chick B) was discovered.

This is the first record of direct observation of siblicide in brown skua and it occurred at a latitude at which the congeneric south polar skua does not show siblicide, possibly owing to release from nutritional constraints (Young & Millar 2003). It remains to be discovered how frequent this phenomenon is and whether nutritional constraints contribute to siblicidal aggression and chick death in brown skua across its broad range of distribution.

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