## Use of unfertilised margins on intensively managed grassland by Black-tailed Godwit *Limosa limosa* and Redshank *Tringa totanus* chicks

ERNST B. OOSTERVELD, SCIPIO VAN LIEROP & MARTEN SIKKEMA

Altenburg & Wymenga ecological consultants, PO Box 32, 9269 ZR Veenwouden, The Netherlands e.oosterveld@altwym.nl

Oosterveld, E.B., van Lierop, S. & Sikkema, M. 2009. Use of unfertilised margins on intensively managed grassland by Black-tailed Godwit *Limosa limosa* and Redshank *Tringa totanus* chicks. *Wader Study Group Bull.* 116(2): 69–74.

Keywords: unfertilised grassland margins, shorebird chicks, chick habitat, meadow birds, Black-tailed Godwit, *Limosa limosa*, Redshank, *Tringa totanus*, grassland management, intensive dairy farming

In order to formulate management measures for breeding meadow birds that are suitable for integration into modern dairy farming, we studied the use of unfertilised grassland margins by chicks of Black-tailed Godwits Limosa limosa and Redshanks Tringa totanus. The study site consisted of 100 ha of intensively and commercially managed grassland and 20 ha of grassland that was managed for breeding meadow birds. In total ten management types were present, one of which was the unfertilised margins. The margins were 3 m wide and situated on both sides of ditches. There were 193 m of margins per ha. The average density of Black-tailed Godwit families with chicks in the margins was four times higher than expected from the overall average across all fields. The average density of Redshank families with chicks was seven times higher in the margins than expected. For both species, the margins had a higher density of families than the management types "mown-beginning-of-May" and "mown-beginning-of-June". The densities of families in the margins did not differ from those in the traditional management types "reserve" and "mown-end-of-June" for both species. Redshank families also preferred "shallow-pool" as a chick habitat. Black-tailed Godwit families especially used the margins during mowing activities. However, survival of the chicks in the margins was not studied. Because large-scale mowing is a main cause of poor survival of Black-tailed Godwit chicks, the function of unfertilised margins as a refuge during mowing activities promises to make an important contribution to chick survival in intensively exploited grasslands. But this should be confirmed by further study.