

## **WORKING HARD, GAINING LESS – THE BREEDING SEASON 2008 OF KITTIWAKES AT HELGOLAND, SOUTH-EASTERN NORTH SEA**

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Since 1990 the large colonies of the Black-legged Kittiwake *Rissa tridactyla* in the northern North Sea experienced substantial declines in breeding numbers of more than 50%. In contrast, the breeding numbers of kittiwakes at Helgoland in the south-eastern North Sea doubled during the same period and lately maintained relatively stable numbers of approximately 7,000 breeding pairs. A comprehensive evaluation of the situation of the kittiwake breeding colony at Helgoland however requires up-to-date information on breeding success. In June/July 2008, we carried out observations on different breeding parameters of kittiwakes in the breeding colony at Helgoland that enabled conclusions on breeding success. We observed low values of nest attendance and high foraging efforts of parents, low feeding frequencies and exceptionally low numbers of chicks. Diet analyses remarkably revealed the presence of terrestrial prey species and a higher percentage of marine invertebrates compared to results of previous diet studies at Helgoland. These results indicated unfavourable foraging conditions and a thus induced low breeding success of kittiwakes at Helgoland during 2008.