



Gepubliceerd op *Sovon.nl* (<https://www.sovon.nl>)

[Home](#) > Adverse effects of agricultural intensification and climate change on breeding habitat quality of Blacktailed Godwits *Limosa l. limosa* in the Netherlands

Publicatie



Adverse effects of agricultural intensification and climate change on breeding habitat quality of Blacktailed Godwits *Limosa l. limosa* in the Netherlands

Agricultural intensification is one of the main drivers of farmland bird declines, but effects on birds may be confounded with those of climate change. Here we examine the effects of intensification and climate change on a grassland breeding wader, the Blacktailed Godwit *Limosa l. limosa*, in the Netherlands. Population decline has been linked to poor chick survival which, in turn, has been linked to available foraging habitat. Foraging habitat of the nidifugous chicks consists of uncut grasslands that provide cover and arthropod prey. Conservation measures such as agri-environment schemes aim to increase the availability of chick foraging habitat but have not yet been successful in halting the decline. Field observations show that since the early 1980s, farmers advanced their first seasonal mowing or grazing date by 15 days, whereas Godwits did not advance their hatching date.

Ringling data indicate that between 1945 and 1975 hatching dates advanced by about 2 weeks in parallel with the advancement of median mowing dates. Surprisingly, temperature sums at median mowing and hatching dates suggest that while the agricultural advancement before 1980 was largely due to agricultural intensification, after 1980 it was largely due to climate change. Examining arthropod abundance in a range of differently managed grasslands revealed that chick food abundance was little affected but that food accessibility in intensively used tall swards may be problematic for chicks. Our results suggest that, compared with 25 years ago, nowadays (1) a much higher proportion of clutches and chicks are exposed to agricultural activities, (2) there is little foraging habitat left when chicks hatch and (3) because of climate change, the vegetation in the remaining foraging habitat is taller and denser and therefore of lower quality. This indicates that for agri-environment schemes to make a difference, they should not only be implemented in a larger percentage of the breeding area than the current maxima of 20–30% but they should also include measures that create more open, accessible swards.

Download

Pdf op te vragen via [Wolf Teunissen](#) [1]

Auteurs:

Kleijn, D., Schekkerman, D., Dimmers, W., Kats van R.J.M., Melman, D., Teunissen, W.A.

Jaar van uitgave:

2010

Uitgever:

IBIS

Publicatiemedium:

Artikel

Bron artikel:

IBIS - International Journal of Avian Science

Jaargang bron:

2010

Soortgroep:

[Weidevogels](#) [2]

Publicatietaal:

Engels

Bron-URL: <https://www.sovon.nl/nl/publicaties/adverse-effects-agricultural-intensification-and-climate--hange-breeding-habitat-quality>

Links

[1] <https://www.sovon.nl/nl/content/wolf-teunissen>

[2] <https://www.sovon.nl/nl/taxonomy/term/78>