

The background of the slide is a photograph of a flock of geese in a grassy field. Some geese are dark with white patches, while others are brown. A large, semi-transparent white circle is overlaid on the right side of the image, containing the title and other text.

Experiences with laser and other scaring techniques in the Netherlands

AEWA Webinar 09-12-2021
Agriculture Task Force

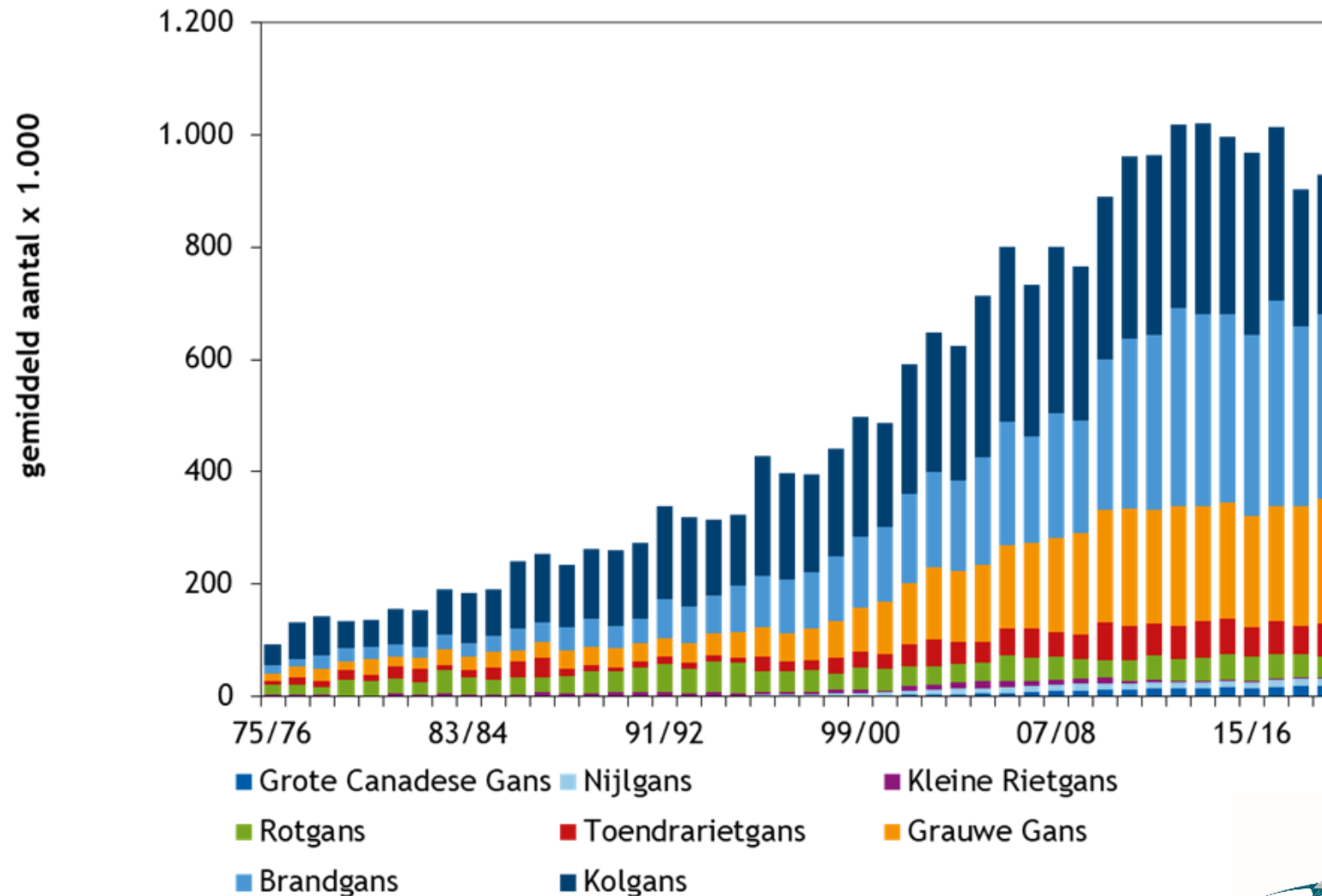
Julia Stahl & Joris Latour



Altenburg & Wymenga
ECOLOGISCH ONDERZOEK



Winter goose numbers in NL



Crop damage

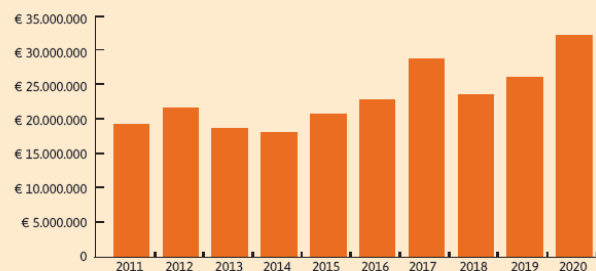
2020

Dit zijn de cijfers van tegemoetkomingen in schade die door BIJ12 in het schadejaar 2020 namens de provincies zijn uitgekeerd. Een schadejaar loopt van 1 november tot 31 oktober.

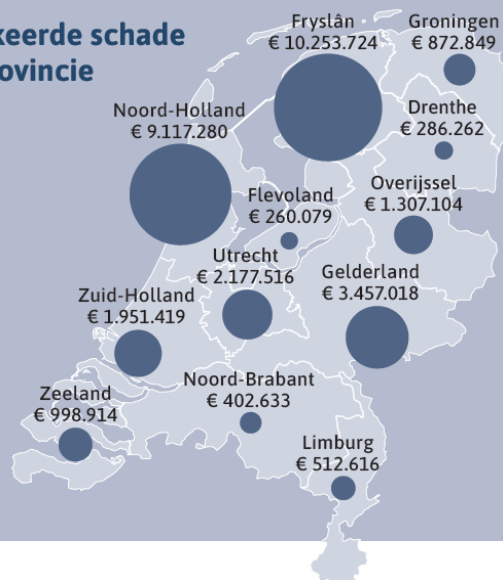
Annual
compensation

€ 31.597.415

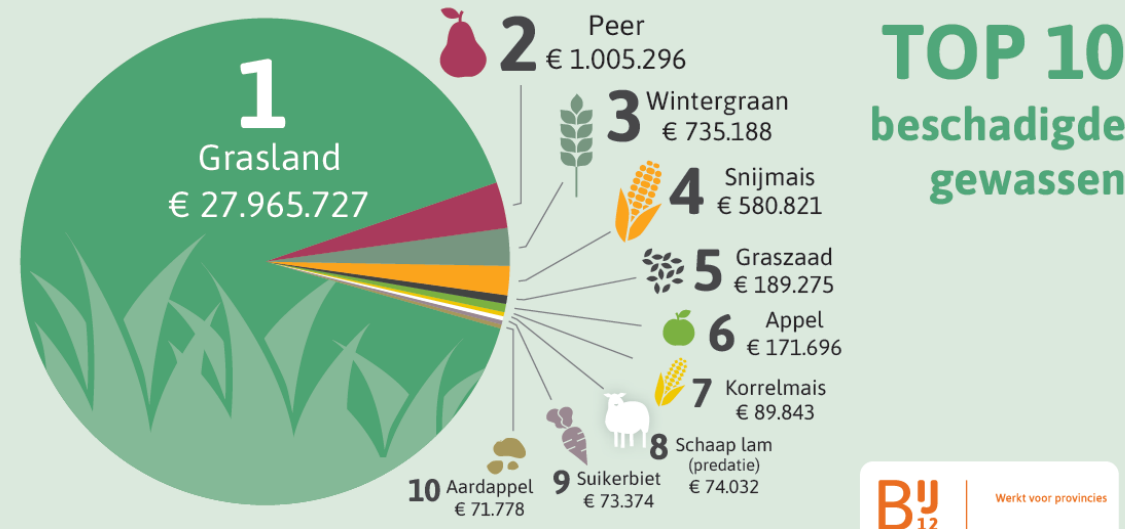
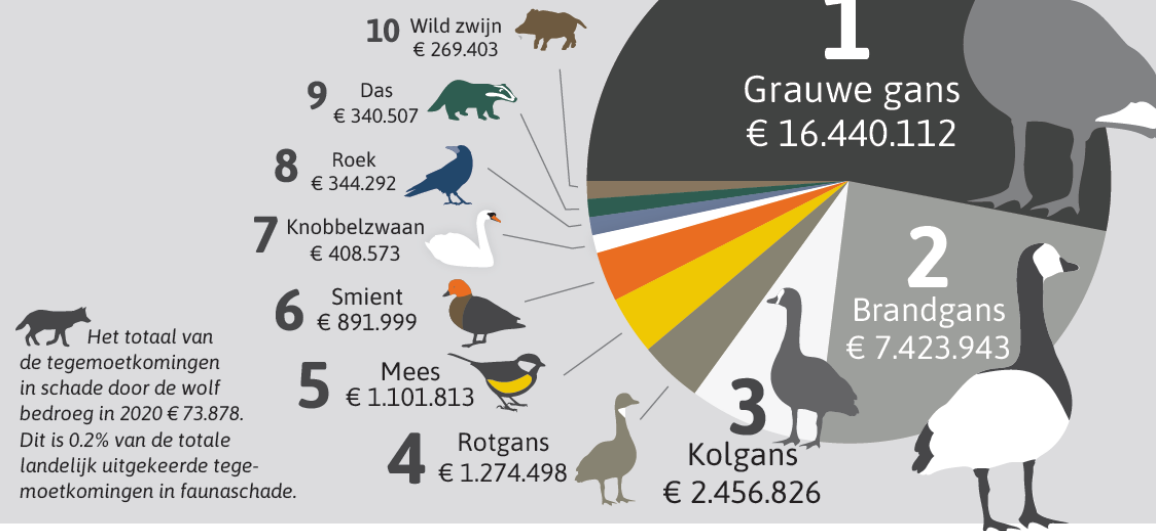
Uitgekeerde tegemoetkomingen sinds 2010



Uitgekeerde schade per provincie



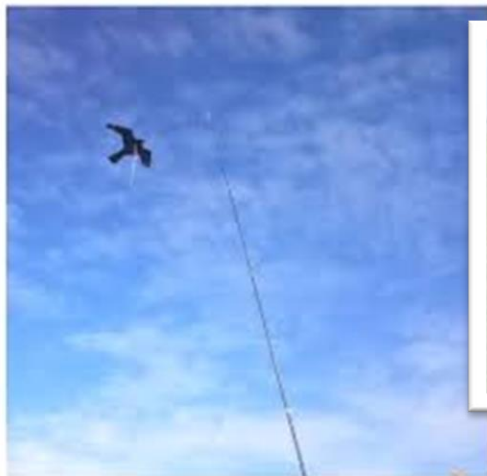
TOP 10 schadeveroorzakende dieren



TOP 10 beschadigde gewassen

BIJ12

Werkt voor provincies



Praktijkproef inzet lasers voor beperking ganzen-schade



A&W-rapport 2388

in opdracht van

Bij12 - Faunafonds

Bij12

Werkt voor provincies



seagull-control.com



© Agrilaser

Research aims



Response of geese to laser as scaring device



...under different environmental conditions



Response of other birds to laser

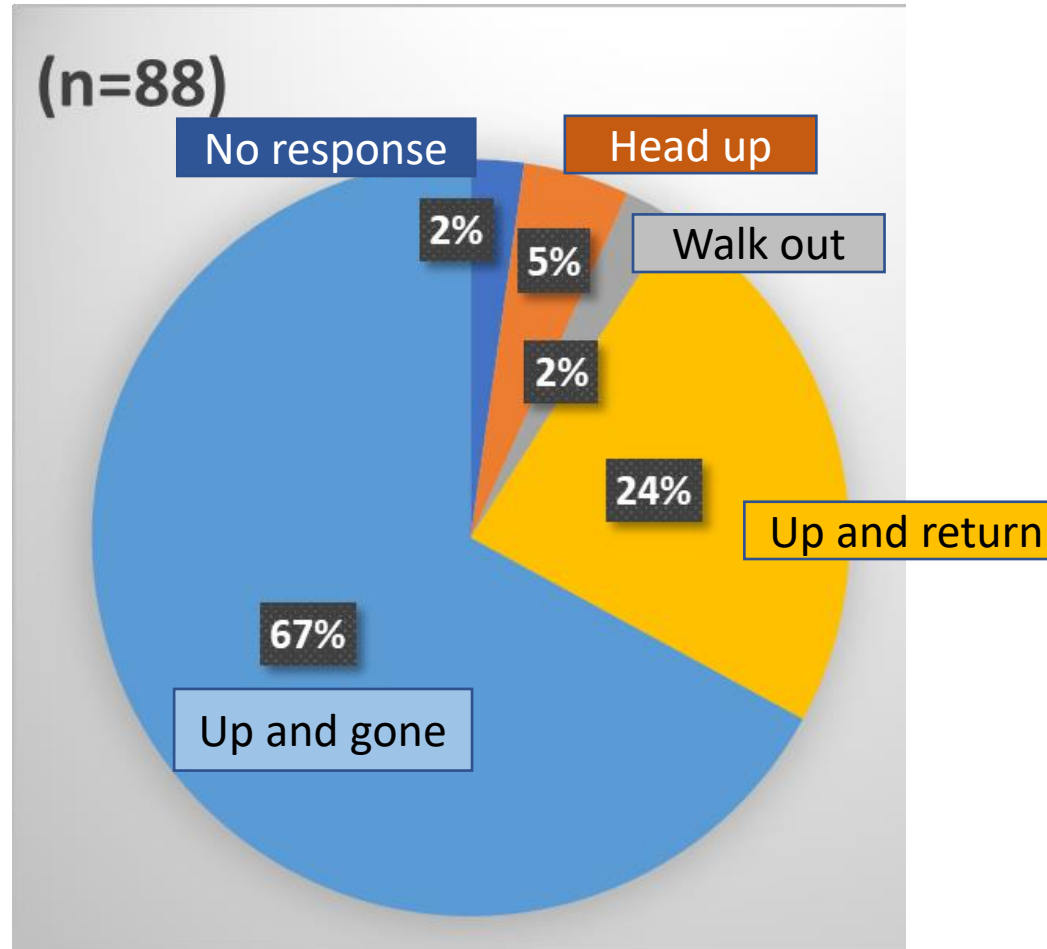


Habituation



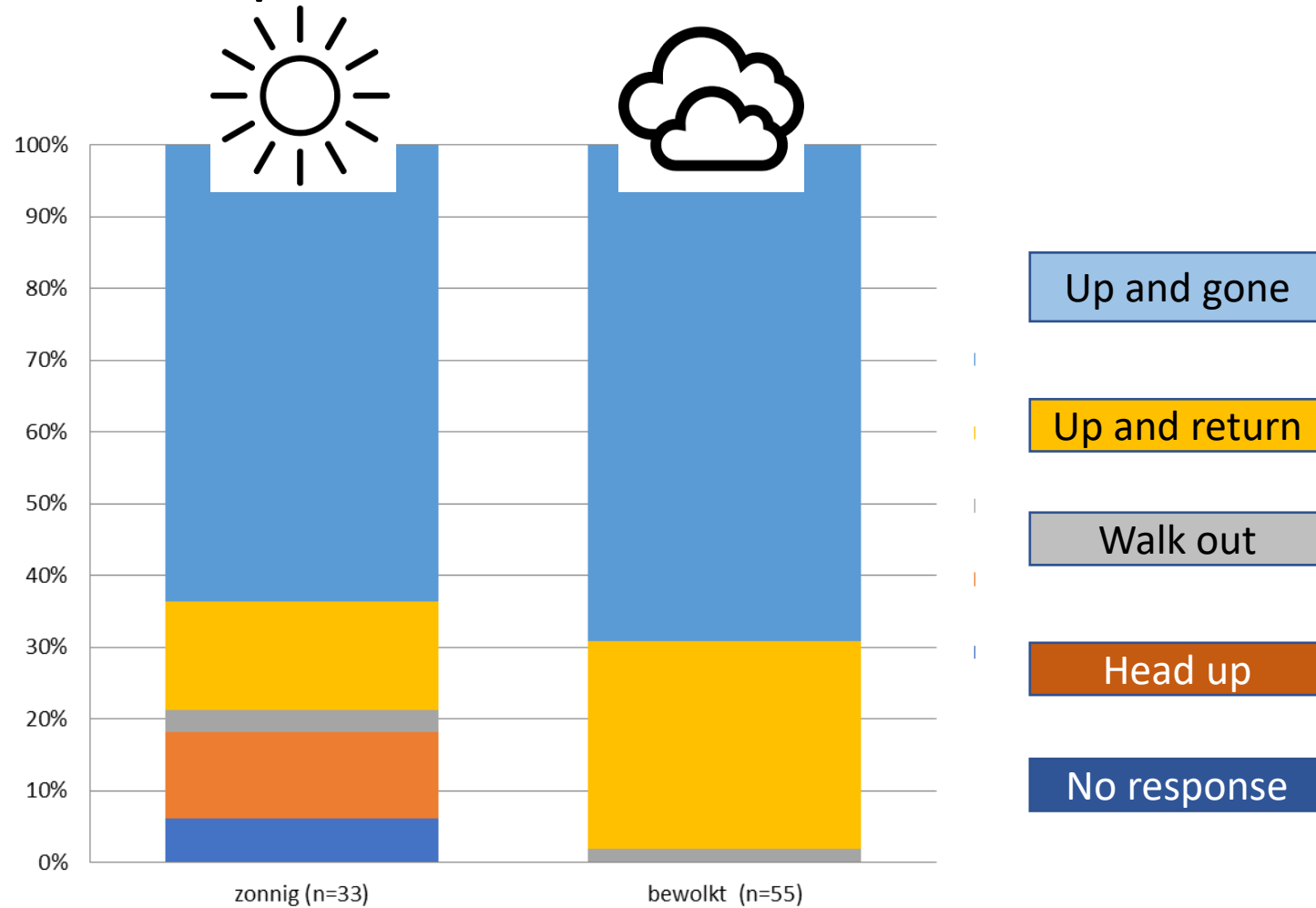
Crop damage prevention (fixed vs. handheld vs. control)

Initial response of geese to laser beam

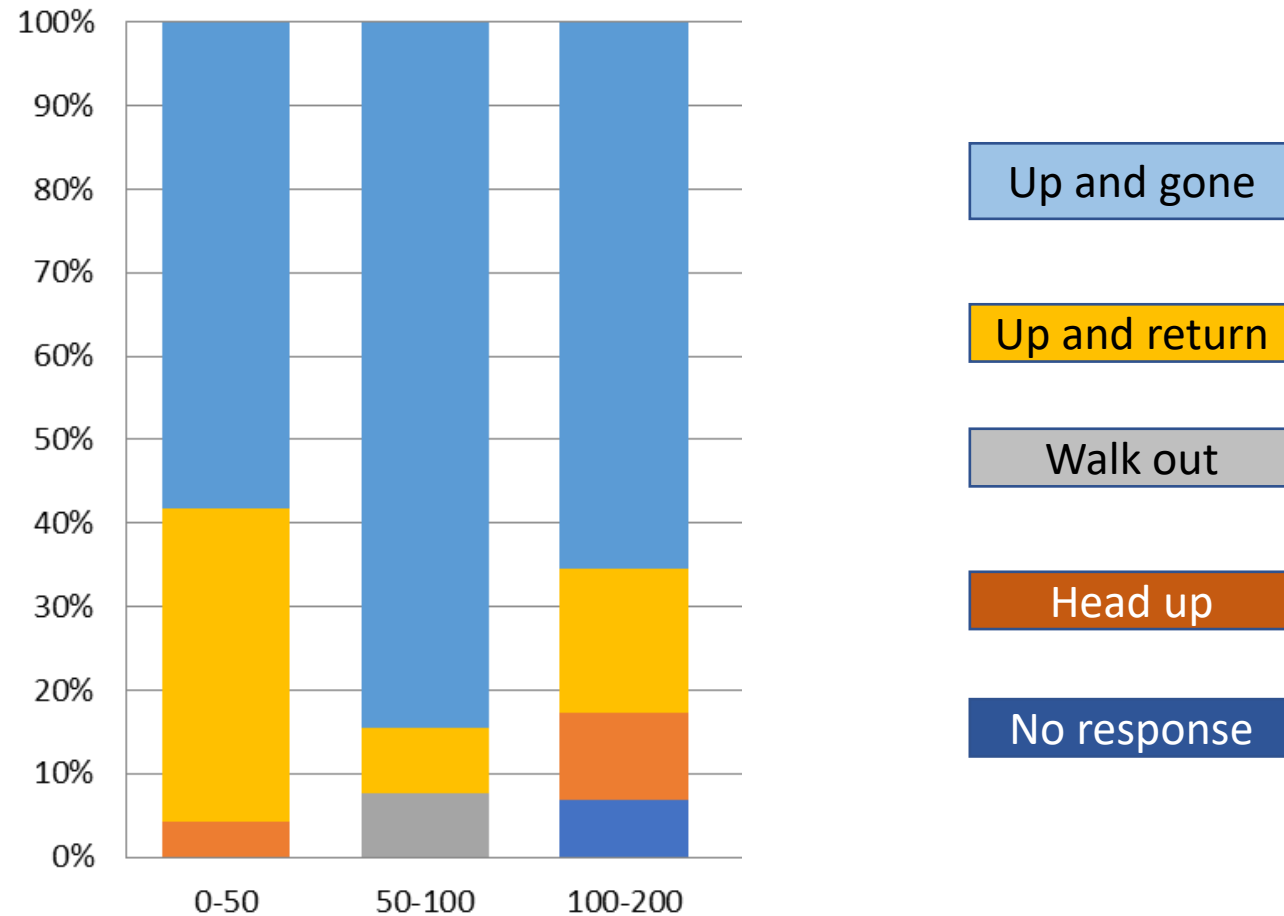


Responding to handheld laser device

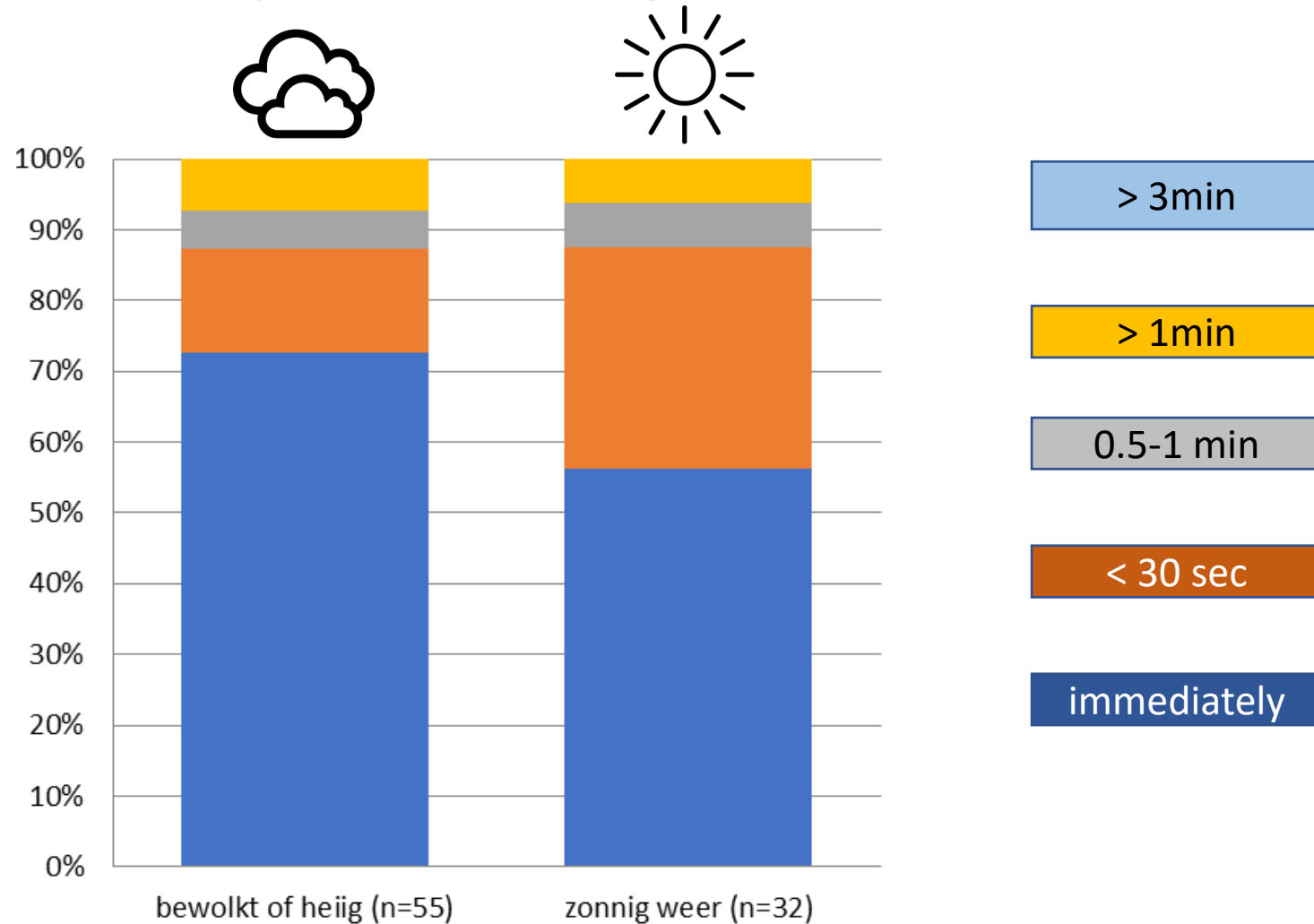
Goose response in relation to weather



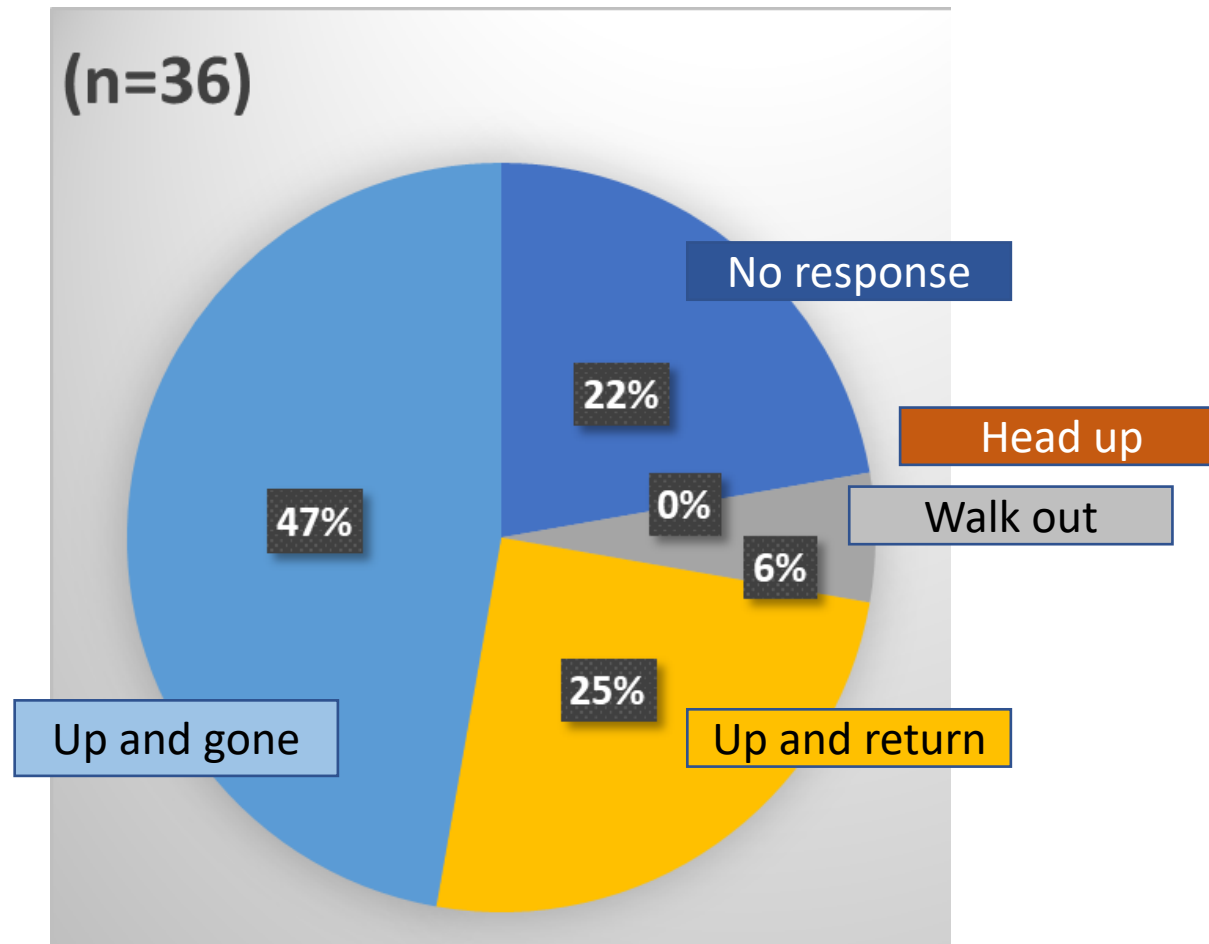
Reaction distance (m) of geese

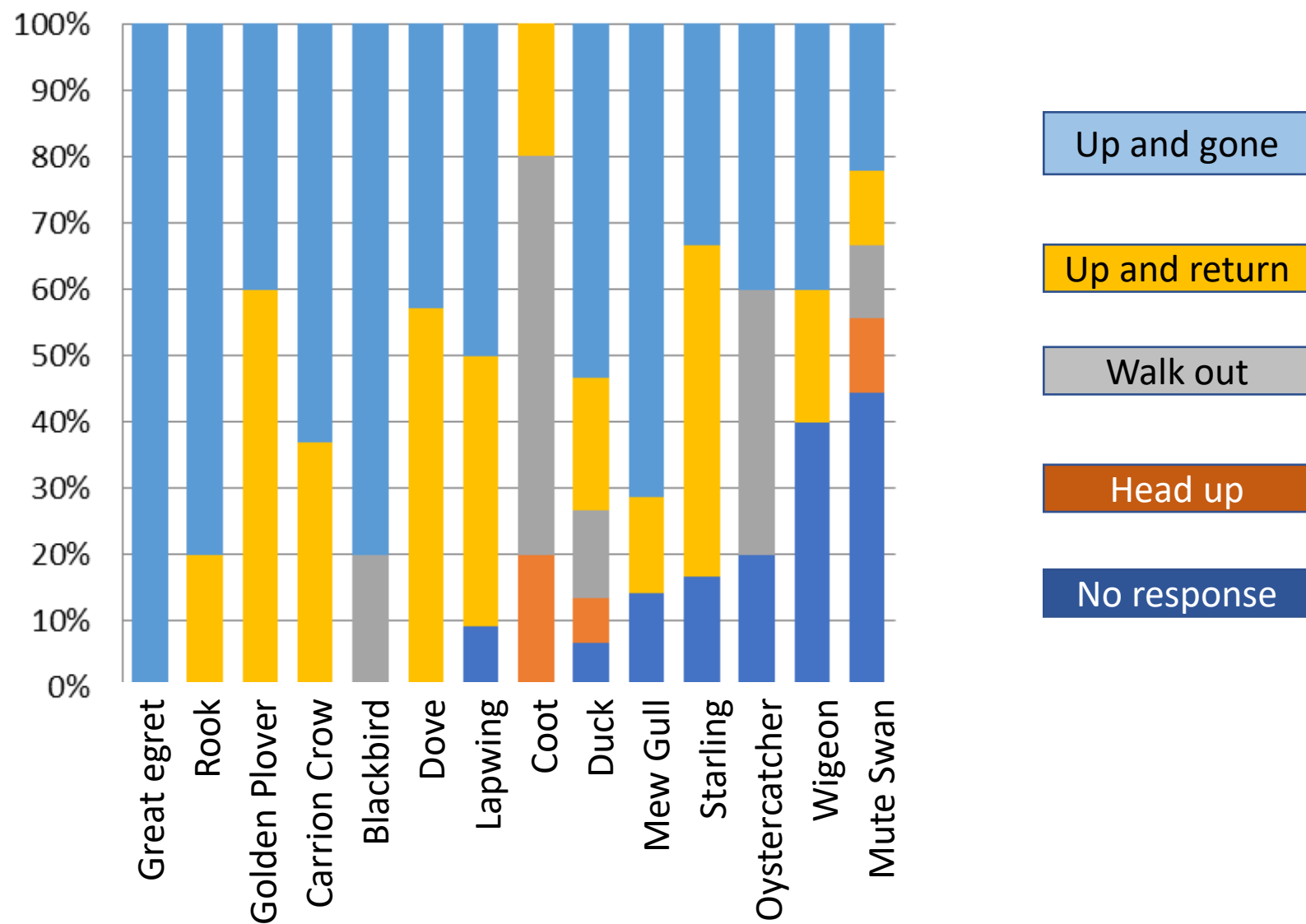


Speed of response in geese

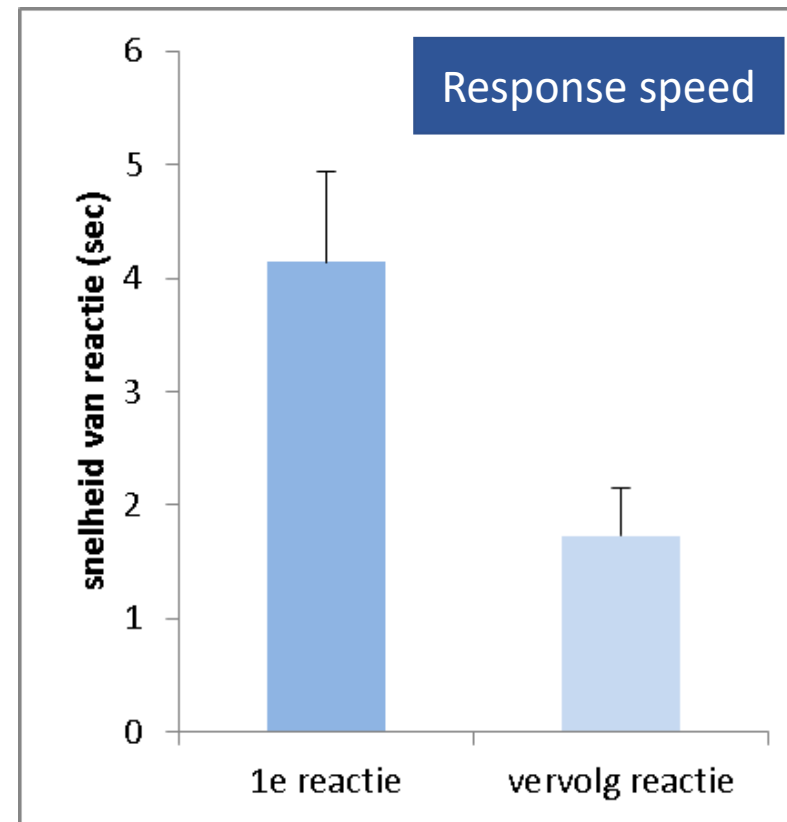
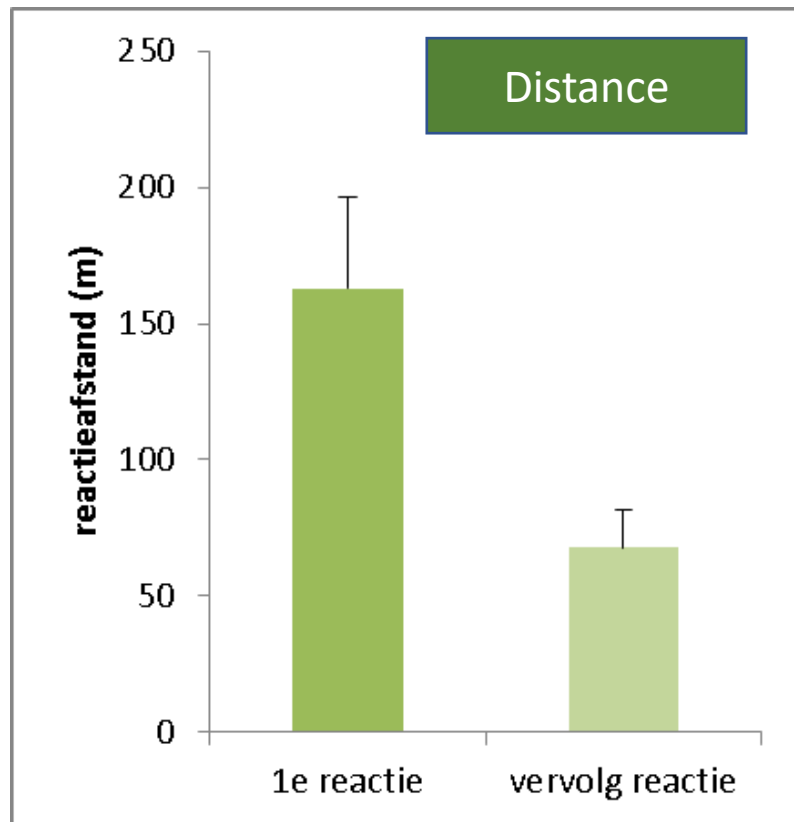
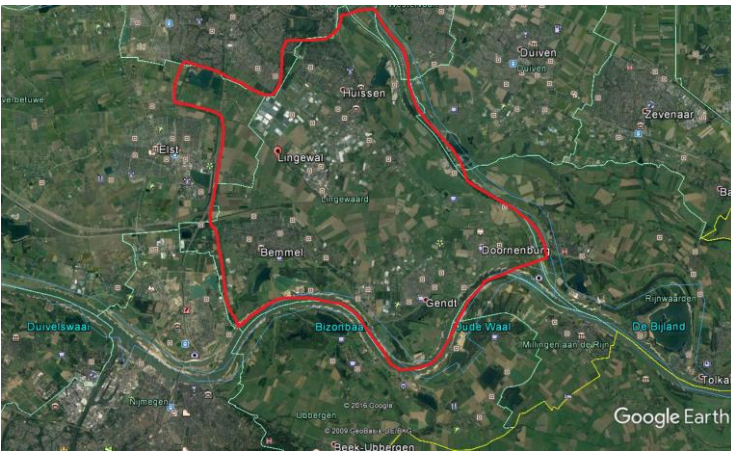


Response of meadow birds to laser beam





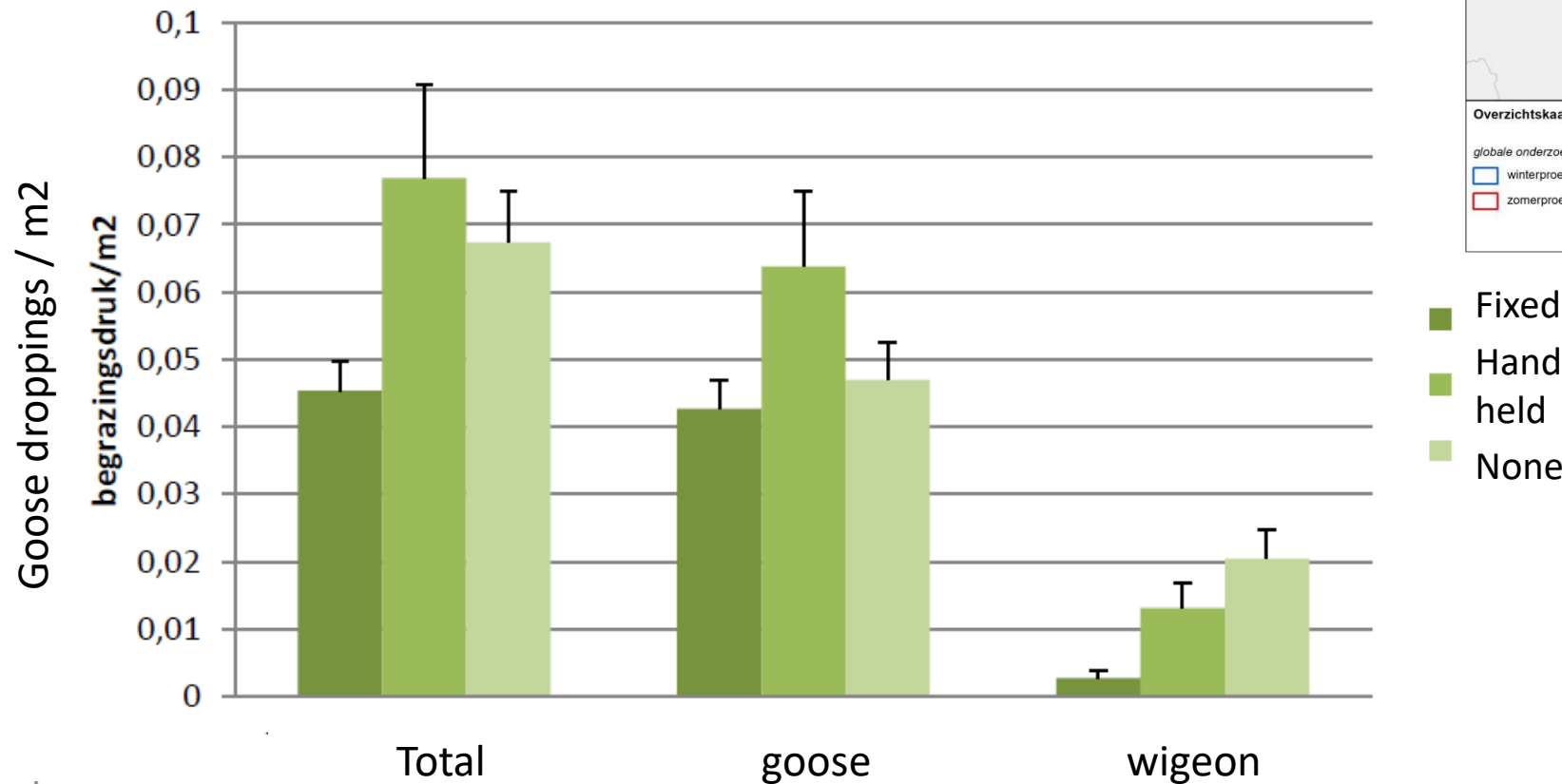
Habituation (marked geese)



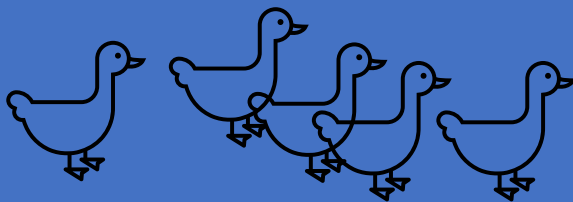
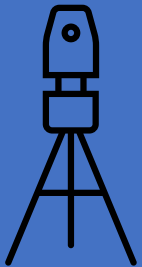
At second encounter with laser:

- Reaction at shorter distance
- Quicker response

Impact of laser on grazing pressure



Wrapping up....



Laser devices can keep birds off agricultural land

...as (a large variety of species of) birds continue to be scared by erratic pattern of light on the ground

Birds will repeatedly be scared...

...but you can't beam them into outer space – birds will return as soon as visual stimulus is gone.

Visual scaring by light is limited in bright weather.

Crop damage prevention will fail as soon as scaring is absent – locations may be extra attractive in absence of scaring .

Current research project
on acoustic scaring



Foto R. Slaterus

Control



treatment 1



treatment 2

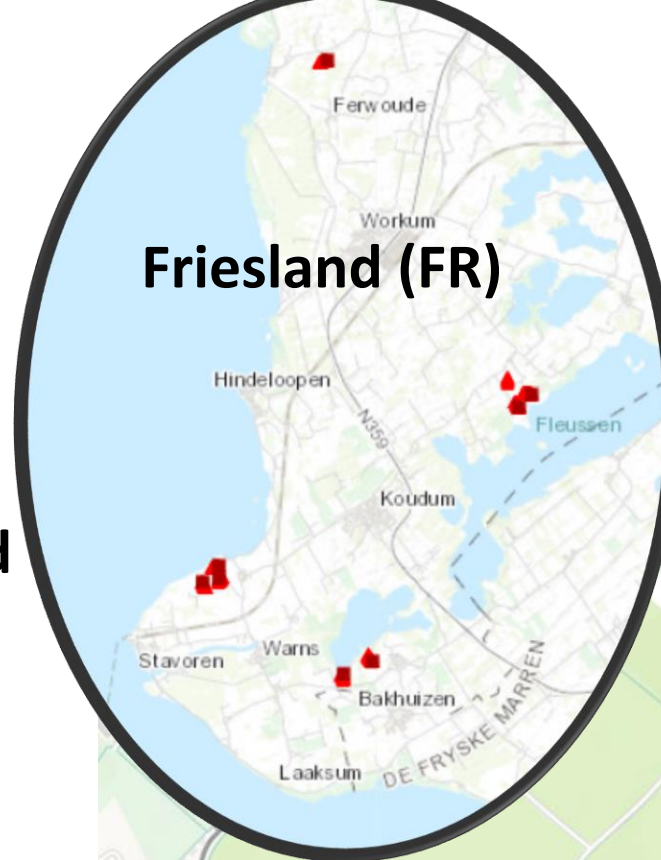


8-10 replicates per
treatment

Responsive parameter:
goose droppings =
grazing intensity



The field trial



Thank you

- Dutch farmers and hunters contributing to the field studies
- The project team, especially the team in the field
- BIJ12, Ton Heeren and William van Dijk



Download link – report in Dutch:

<https://www.bij12.nl/wp-content/uploads/2018/09/Laser-Rapport-2388-AW-SOVON-versie-15-5-2018.pdf>

