## Research Institute for Nature and Forest, Brussels, Belgium

## **Evaluation Of A Large Scale Management Strategy For Summering Geese In** Flanders And Zealand (Belgium/the Netherlands)



Management of invasive (non-)native geese in Belgium and the Netherlands was, until recently, mainly done by egg pricking and hunting. In this project, these actions were intensified and additionally moult trapping was performed on a larger scale. This resulted in a significant decrease of Canada (Branta canadensis) and feral goose (Anser anser f. domestica) numbers, but no differences in the numbers of greylag (Anser anser) and barnacle goose (Branta leucopsis) were observed.



The study area (blue) spans a large coastal area in both Belgium and the Netherlands.

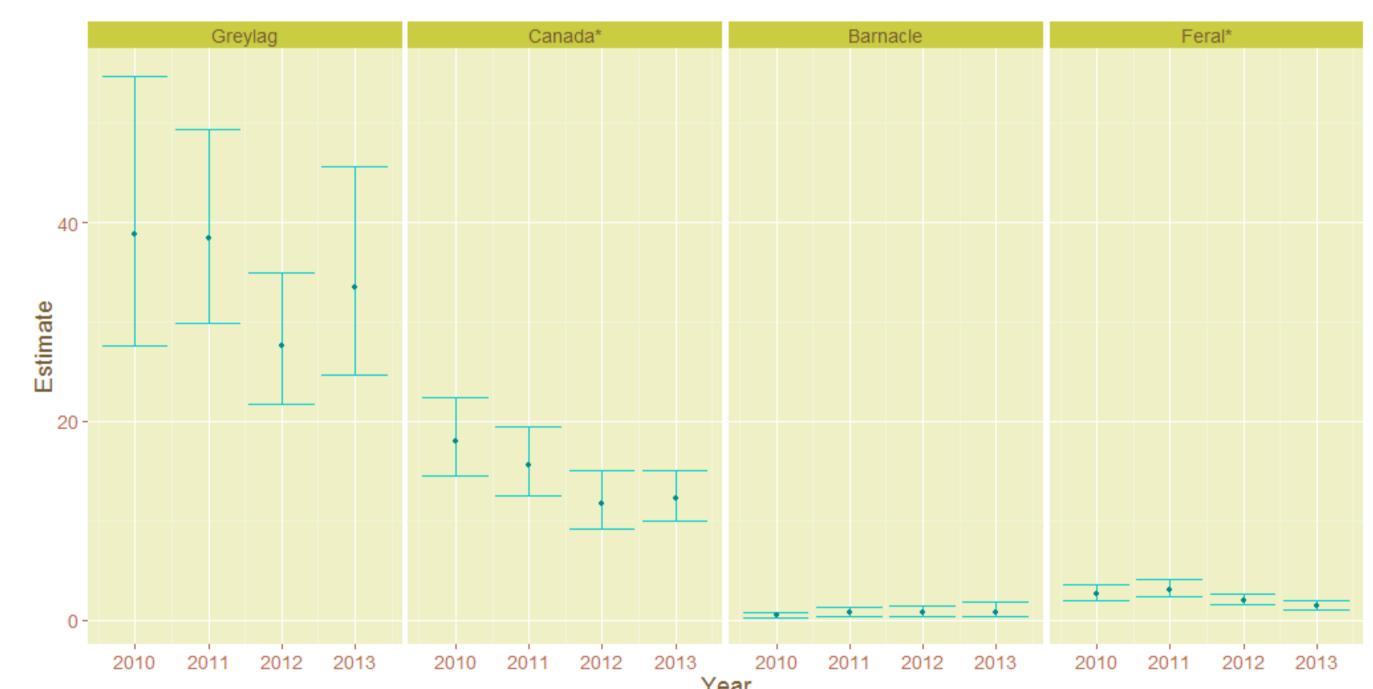
In moult trapping, flightless geese are herded towards a funnel trap

To evaluate the effectiveness of the combined management, mid-summer simultaneous counts were performed. Based on these counts and management effort data, geeglm-models were constructed to estimate goose number trends and evaluate the importance of the different management methods.

Moult captures were very successful for Canada geese, with a total of 7829 caught over four years. In relation to density, catch success for feral goose was also very high. Greylag geese, although comparable in density, were only caught in low numbers since they did not moult in the study area. Because barnacle geese moulted later in the season, they were also caught in low numbers.

Year	Canada	Greylag	Feral	Others	Total
2010	1.977	29	176	82	2.264
2011	2.499	66	245	23	2.833
2012	1.722	18	112	180	2.032
2013	1.631	378	290	57	2.356
Total	7.829	491	823	342	9.485

Moult trapping efforts throughout the different project years



The modeled average number (+/-sd) of geese per location per year

For the two species with a high catch success, the impact was significant over four years, and related to catching efforts. To obtain similar results for barnacle goose, a separate and later catching season is needed. The case of greylag geese shows the importance of a coordinated range-wide approach.