

Damages on cropland and grassland caused by wintering geese

Experiences from Lower Saxony

How can farmers face the geese damages in Lower Saxony?

Within special protection areas (‘Birds Directive’) (in selected areas)

Agri-environment schemes

Reporting high damages
(voluntary payments of
Lower Saxony)

Out of special protection areas (‘Birds Directive’)

Scare/Chase the geese

Reporting high damages
(voluntary payments of
Lower Saxony)



Rastspitzenprogramm (noGa)

Collaboration project of

Agri-environment schemes (AUM)

Arrangements for protection of nordic migratory birds (NG)



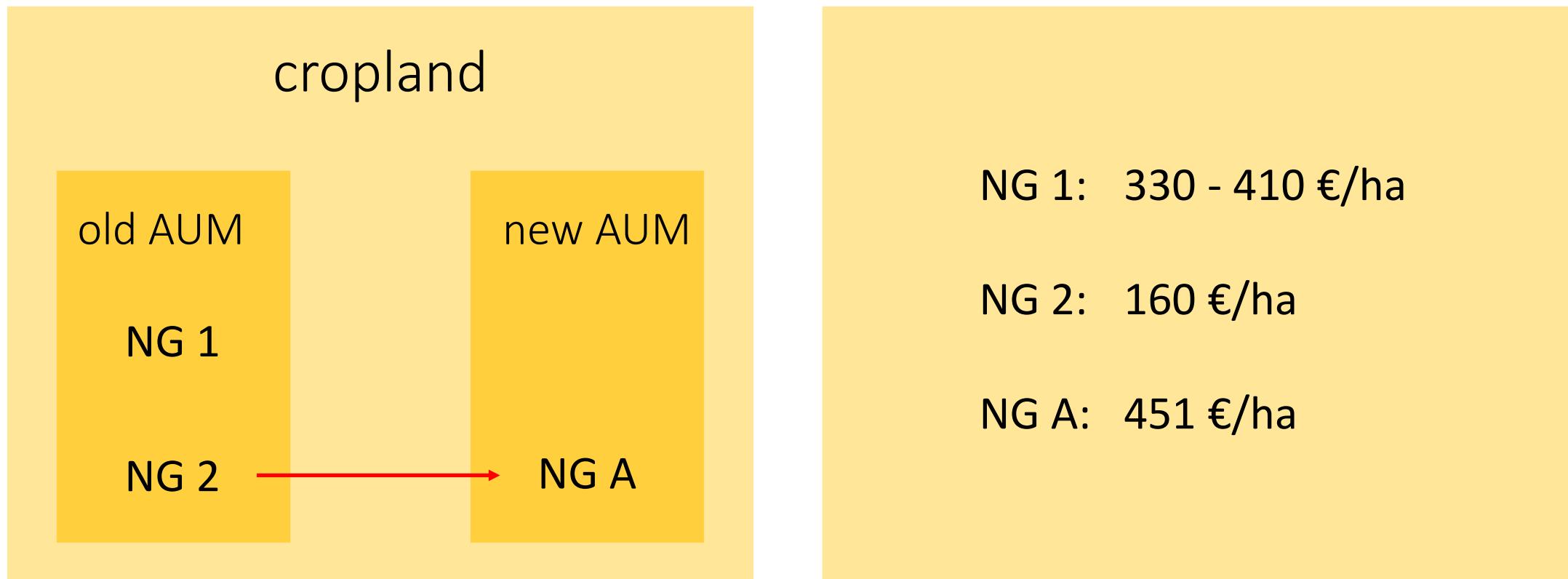
Agri-environment schemes (AUM)

Arrangements for protection of nordic migratory birds (NG)

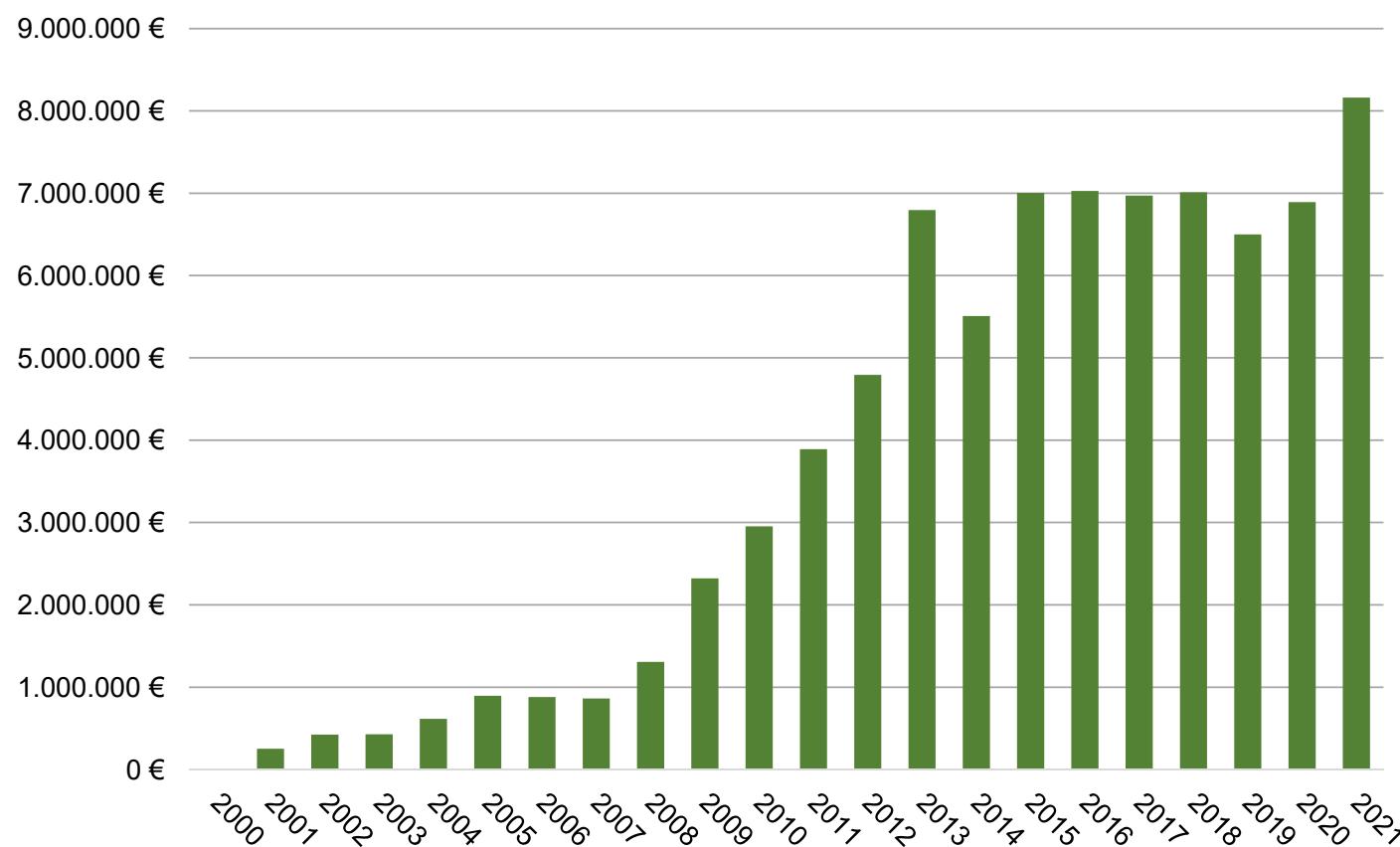


Agri-environment schemes (AUM)

Arrangements for protection of nordic migratory birds (NG)



Agri-environment schemes (AUM) Arrangements for protection of nordic migratory birds (NG)



NG1, NG2, NG3 and NG4

2021:
> 8 Mio. € on
approx. 29 000 ha

Depends on area, not actual
damage

Different damage intensities – Wheat on 05th May 2022



Different damage intensities – Wheat on 05th July 2022







Damages - rapeseed



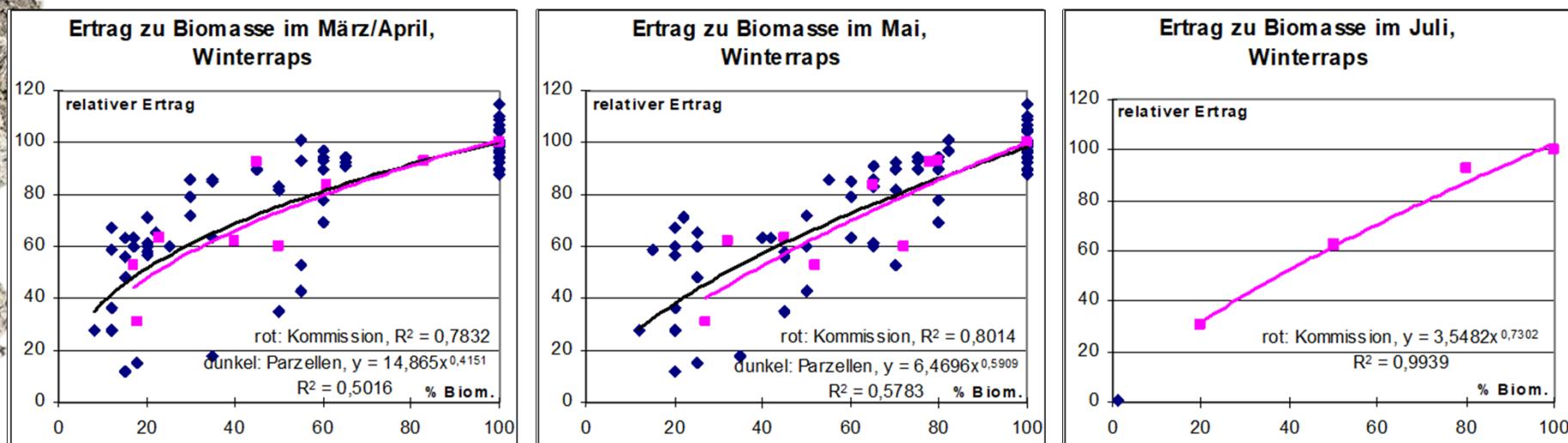
Rastspitzenprogramm cropland (noGa Acker)

- 2010: developed and tested by Keno Arends (LWK) in Krummhörn and Westermarsch
- Different estimation and evaluation procedures were tested
- Stepwise the area of the program was increased
- Since the directive in 2019 it is possible to approve 50.000 € per year and farmer
- Goal: to achieve a even bigger area where the program can be used (whole special protection areas (‘Birds Directive’))



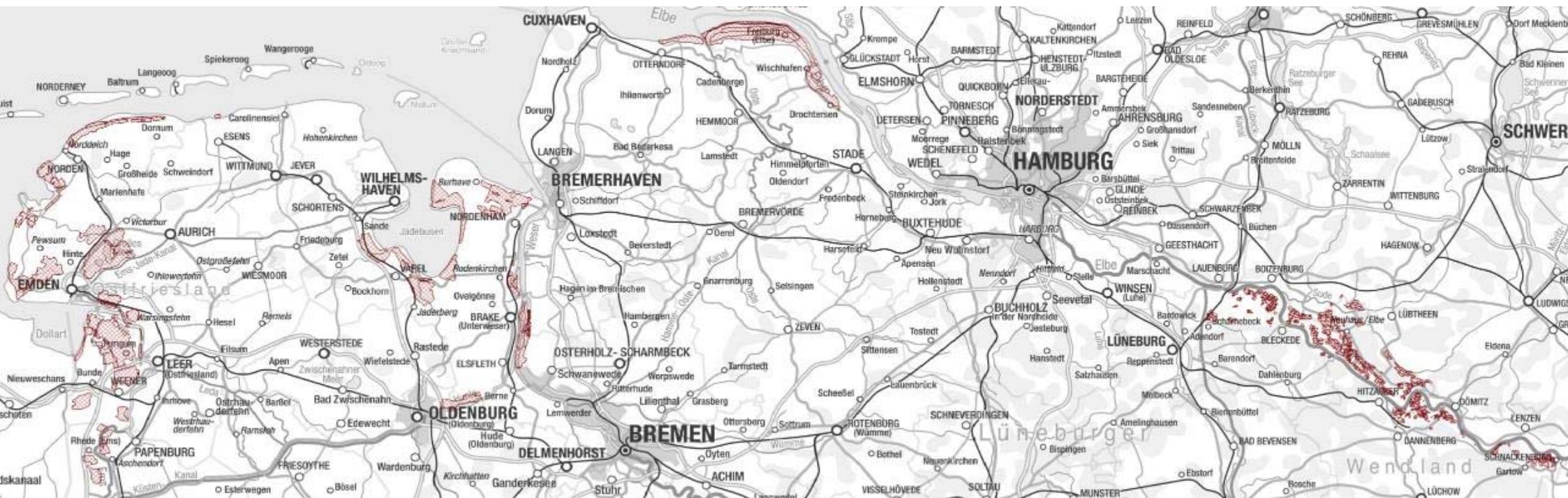
Rastspitzenprogramm cropland (noGa Acker)

→ Functional relation between actual yield and biomass estimation is the most suitable



Abhängigkeit des tatsächlich geernteten Relativvertrages von der geschätzten, relativen, oberirdischen Biomasse im März/April, Mai und Juli in Raps

Aktuelle Kulisse noGa Acker



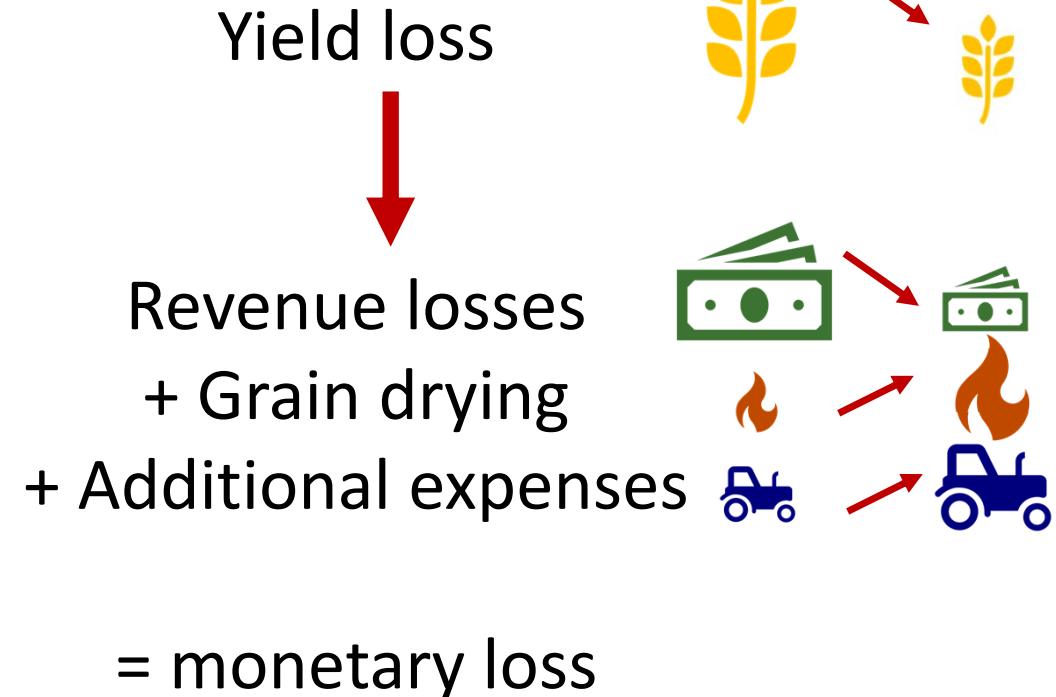


Course of action – noGa Crop

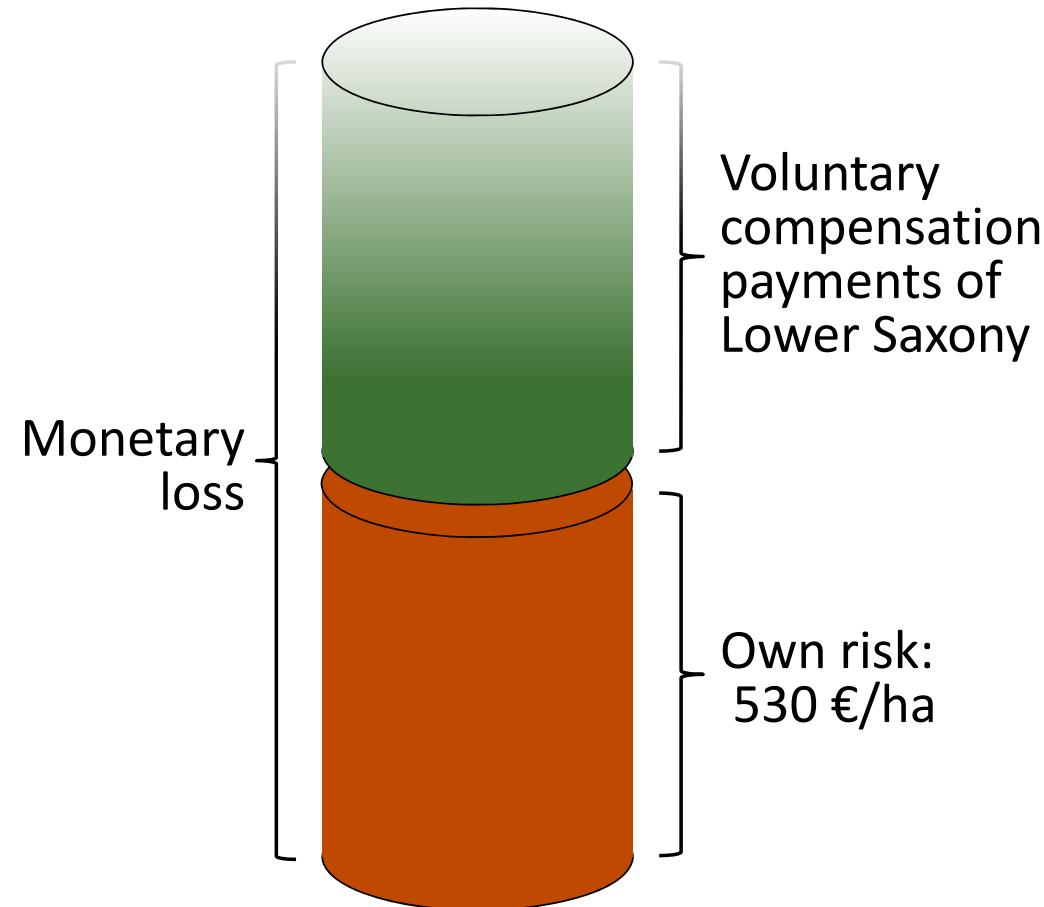
- Preservation of evidence (starting in winter, shortly after the damage/application)
- Biomass estimation in March and July (sometimes in May as well)
- Comparing grazed and ungrazed areas with each other
- Size and biomass reduction of every single area is estimated
- Calculating the monetary loss

Rastspitzenprogramm Crop (noGa Crop)

→ Calculating the monetary loss:



Rastspitzenprogramm Crop (noGa Crop)



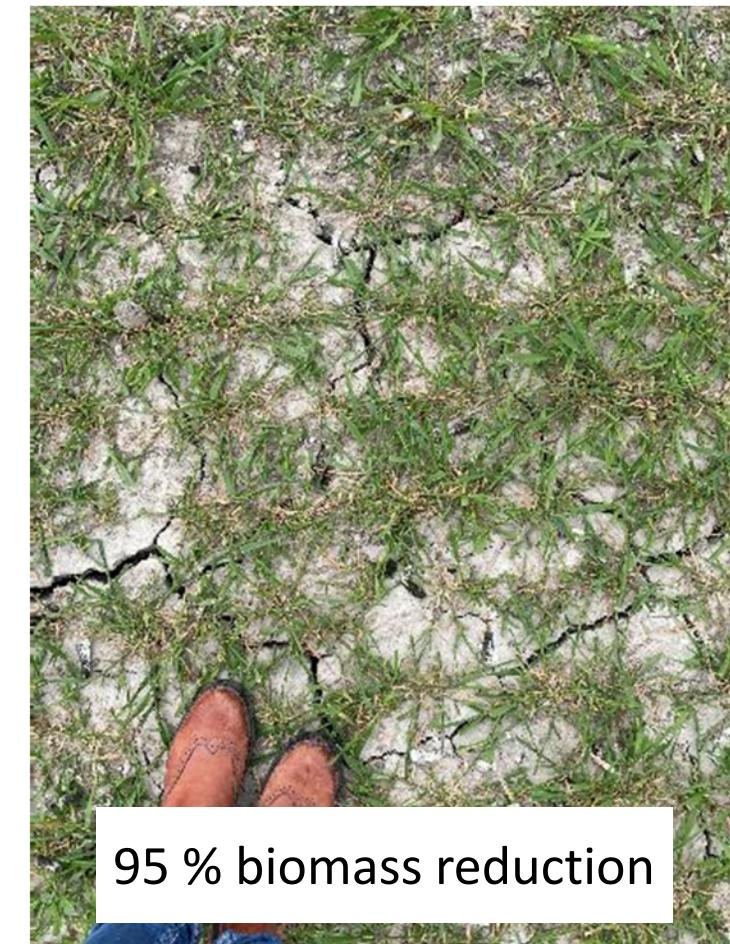
Different damage intensities – Wheat on 05th May 2022



0 % biomass reduction

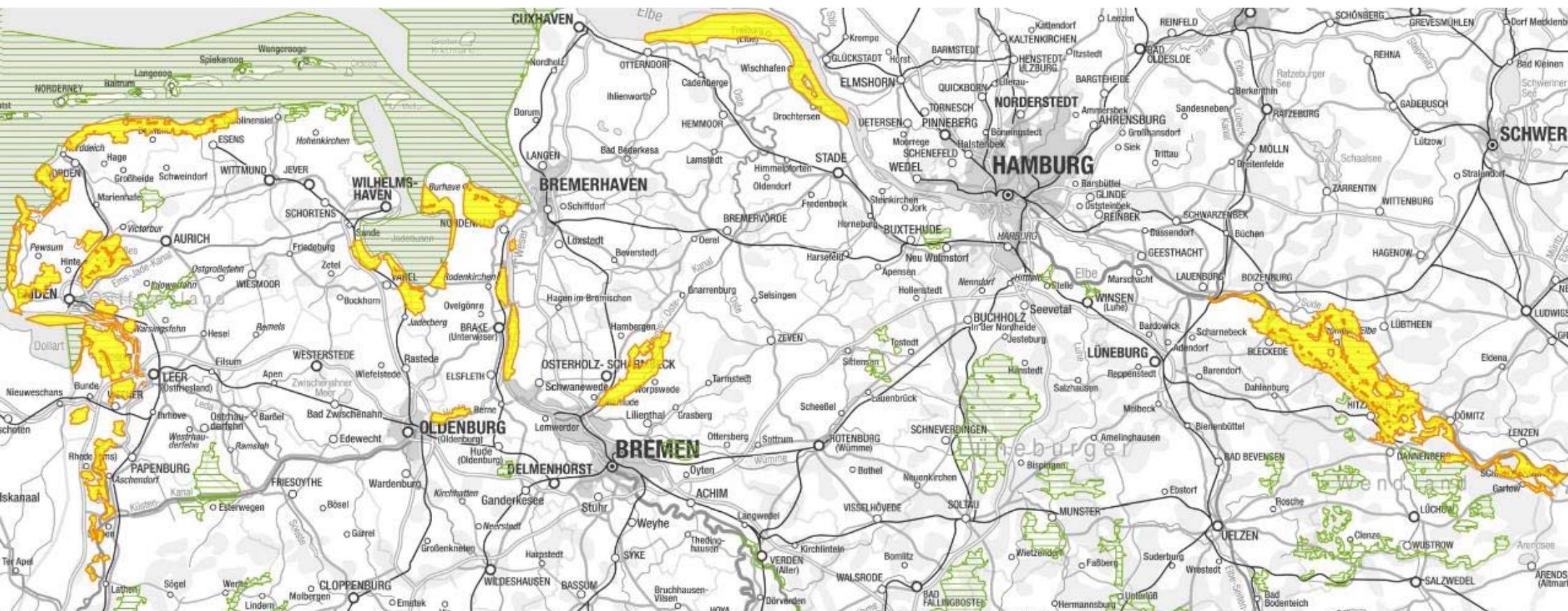


50 % biomass reduction



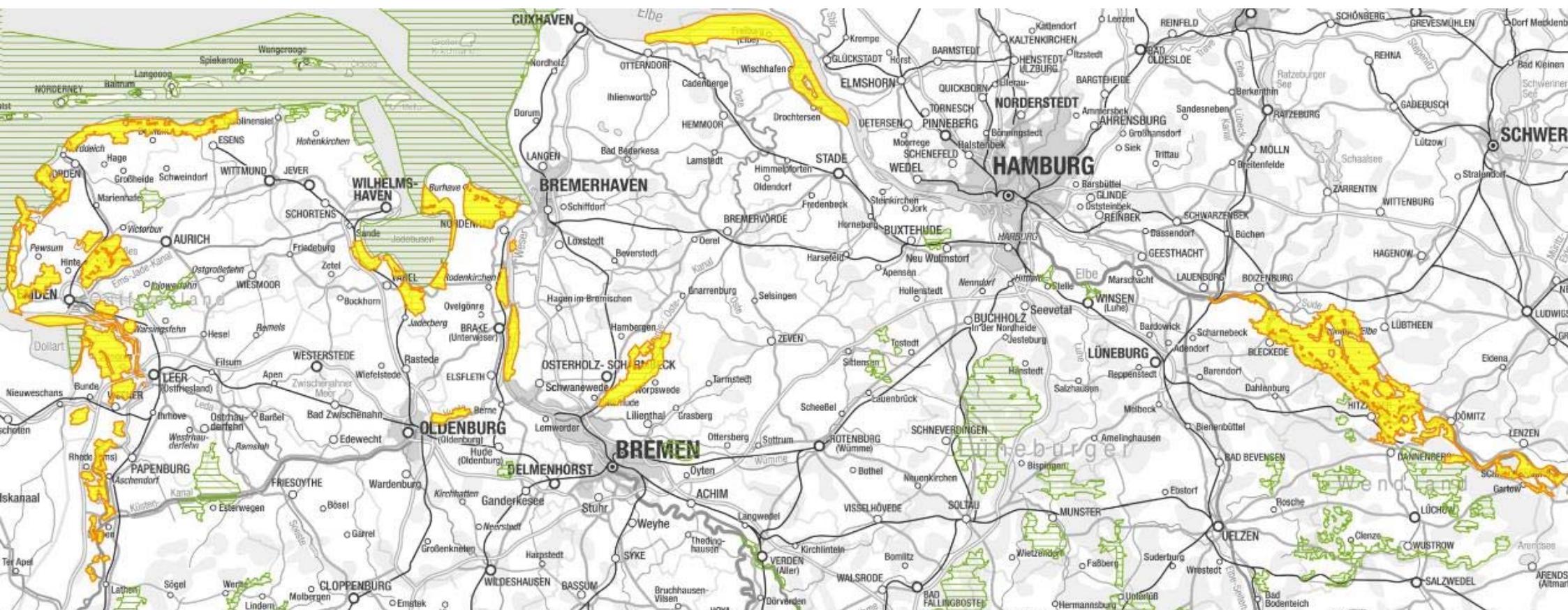
95 % biomass reduction

Planned area noGa Crop



Planned area where farmers are allowed to make an application for the voluntary payments due to geese damages

Actual area grassland



Area where farmers are allowed to make an application for the voluntary payments due to geese damages



Rastspitzenprogram – Grassland

- 2018 project phase was successful
- 2018/2019 testing of practicability
- 2021/2022 expansion of the area
- 2023 a directiv (Billigkeitsrichtlinie) is planned





Course of action – noGa Grassland

- Preservation of evidence (starting in winter, shortly after the damage/application) – only for newly seeded fields
- Measurement of the height of the grass shortly before the first cut
- Comparing grazed and ungrazed areas with each other
- Size of every area is estimated
- Calculating the monetary loss

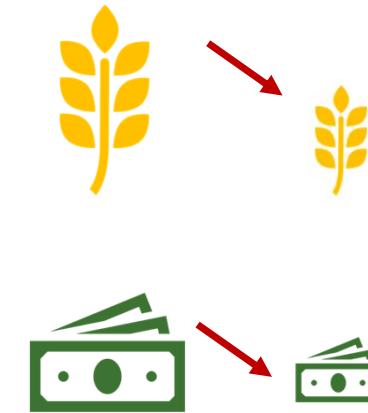
Rastspitzenprogramm Grassland

→ Calculating the monetary loss:

Yield loss



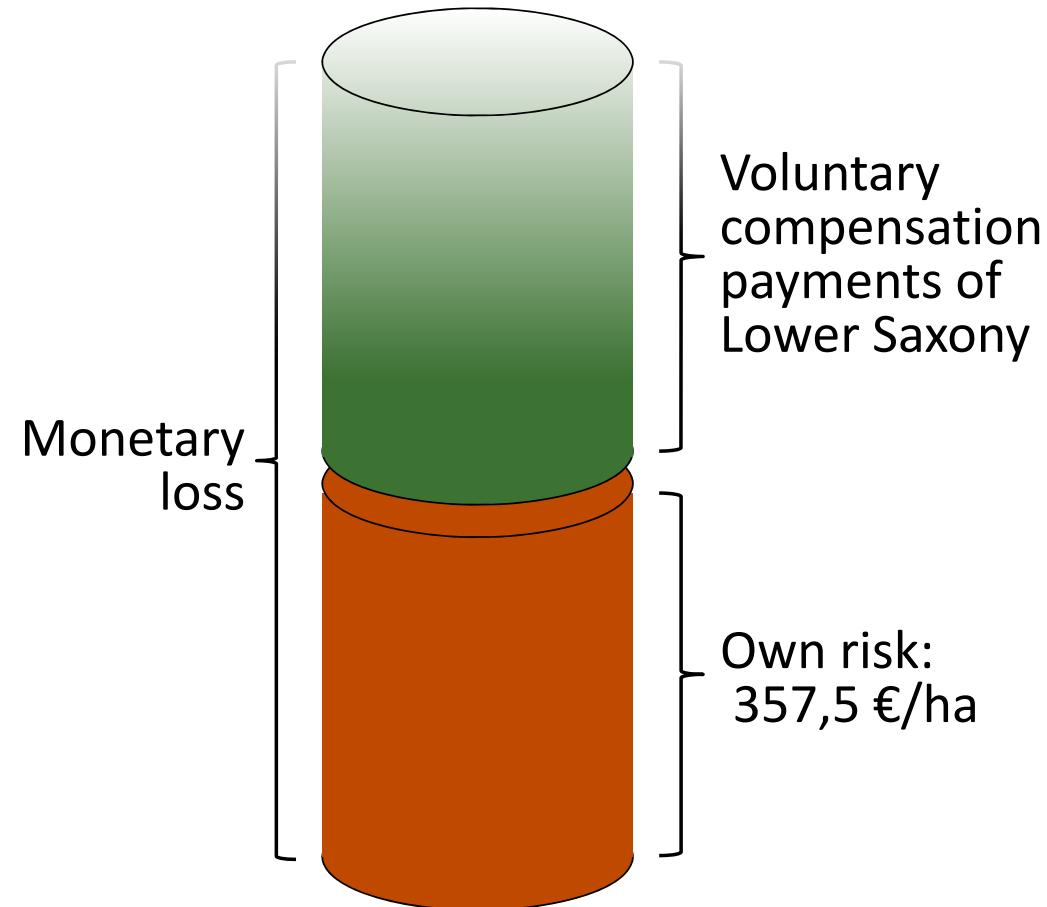
Revenue losses



+ Additional expenses   

= monetary loss

Rastspitzenprogramm Grassland



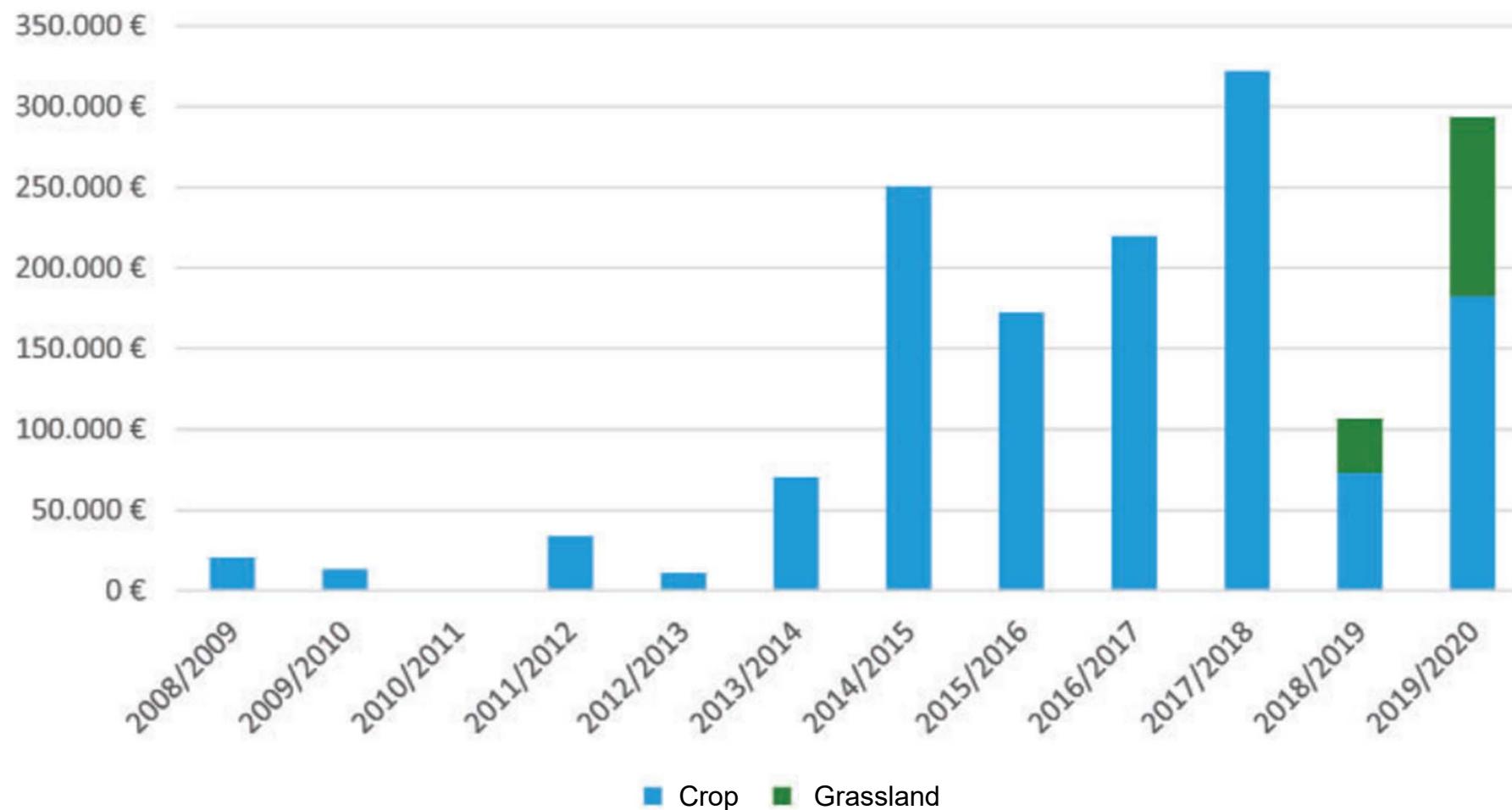
Different damage intensities – Grassland May 2022



Different damage intensities – Grassland 11th May 2022



Rastspitzenprogram – Voluntary Payments of Lower Saxony



Quelle: Düttmann , Kruse und Delingat (2021) – Instrumente zum Schutz arktischer Gänse in Niedersachsen (erschienen in Seevögel Band 42 Sonderheft)