

ASSESSING GEESE DAMAGE IN THE NETHERLANDS

What it is about

Over the last few decades, the Netherlands has become a winter paradise for geese, as modern agriculture created an abundance of winter food on the Dutch fields. Causing much distress to the Dutch farmers, increasingly more geese are staying during spring in the Netherlands as well to breed. The Dutch government has started compensating farmers for

damages of geese-grazing through the dedicated Fauna Fund based on on-the-spot checks. In 2015, around 4,000 compensation claims resulted in payments of about €17m. Through the use of satellite imagery, ilionX helps the Province of Fryslân to automate appraisals and detect and assess geese damage remotely saving time and cost for appraisers.



What we found

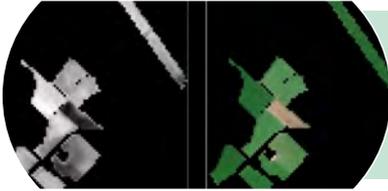
- Many farmers from the Northern hemisphere in Western Europe and North America suffer from damages from geese or from other wild animals.
- Using Sentinel-2 data, the service by ilionX helped the Province of Fryslân to digitalise their processes and provide more efficient public services.
- Farmers benefit from faster payments from the Fauna Fund and set up mitigation measures to curtail damage.
- There are societal benefits from a more transparent system because fraudulent claims that would undermine the compensation scheme can be revealed more efficiently.

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The Satellite Data

Copernicus Sentinel-2 provides free-of-charge frequent wide-swath, high-resolution multispectral imagery with 13 spectral bands over the Netherlands.



The Service Provider

ilionX produces detailed Sentinel-2-based geese damage maps improving the detection of geese damage and assessment of the extent of the damage on agricultural fields in the Province of Fryslân.



The Primary User

The Province of Fryslân benefits from enhanced knowledge about geese damage on farmers' fields. Appraisals can be partially automated saving time and cost whilst prioritising on-the-spot checks in cases of uncertainty.



Other Beneficiaries

While in the past farmers lacked a global overview over the state of their fields between September and April, they now know when and where geese damage occurs. They can put in place mitigation measures to reduce agricultural damage and thus financial loss. Through automated appraisals, they receive compensation faster.



End Use Beneficiary

The general public benefits from a more efficient administration of the Fauna Fund and thus a better usage of public funds.

About the project

Through a series of case studies, EARSC aims to gather quantitative evidence that the usage of Copernicus Sentinel data provides an effective and convenient support to various market applications. These studies are undertaken in the frame of the project "Showcasing the benefits brought by the usage of Sentinels data to society, environment and

economy: a bottom-up assessment based on traceable impacts along selected value chains", under an assignment from the European Space Agency (ESA) funded by the European Union as part of the Copernicus Programme.

Download the full report from the project website



<http://earsc.org/sebs>

