

# Dutch paradise for geese

The Netherlands has become a winter paradise for geese, but much to the distress of Dutch farmers, the birds find such rich pickings that more and more of them are staying all summer as well. Some farmers are reaching for their guns.

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## A BUSY SCENE

Almost 2 million geese in December



## NO EXPENSE SPARED

Harbouring geese costs 17 million per year

## COMPENSATION

The Fauna Fund compensates farmers for damage to land



## OPEN ALL YEAR

Now in summer too: plenty of breeding space

## HOUSE RULES

Winter geese should to stay in their foraging



## TRESPASSERS

Geese found outside their foraging areas will be chased away



**SPEND THE WINTER IN HOLLAND!**

More and more geese discover the hospitable Netherlands

**PLENTY OF SPACE**

More than 80,000 hectares of foraging area

**FRIENDLY**

Many farmers open up their land

**HOME COMFORTS**

Tasty meadows and comfortable nature reserves

**GREAT FOOD**

Farmers' fields serve generous meals

**NUISANCE AND DAMAGE**

Shooting is permitted where there is severe damage

The Dutch countryside teems with life in December, when the numbers of overwintering geese from the Arctic circle reach their annual peak of almost two million birds. It is quite a sight for nature lovers, but a nightmare for Dutch farmers, whose meadows and winter wheat crops get trampled and grazed by the birds. The government compensates farmers for this damage, and in seven years, the claims for winter geese damage to the government's Fauna Fund more than tripled to more than eight million euros in 2008. On the one hand, the EU Birds directive sees it as an international responsibility of the Netherlands to provide the various species of geese with overwintering places. And on the other hand, the government is afraid the costs are going out of control. There seem to be more birds every year.

### NUMBERS UP TENFOLD

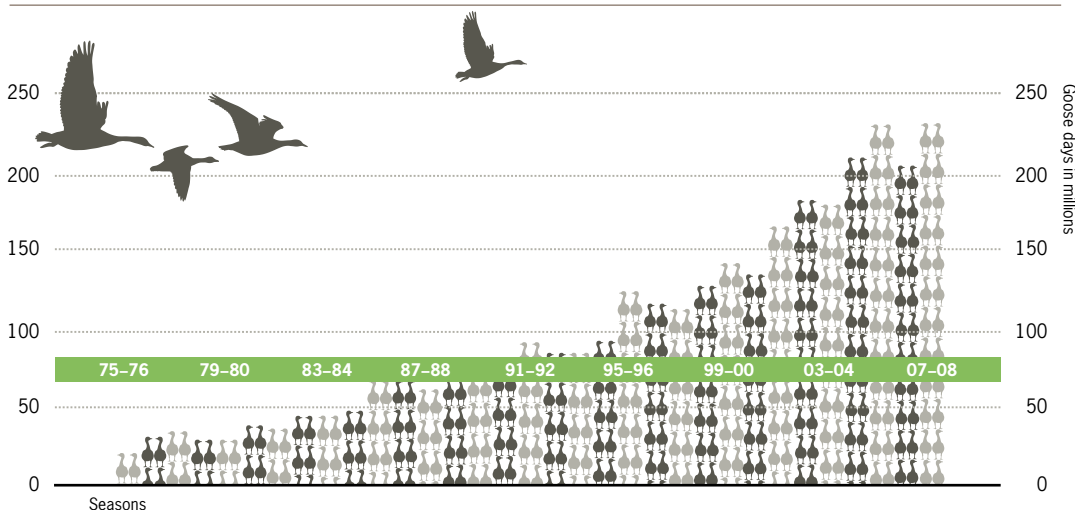
Since the nineteen seventies, the government has restricted goose hunting, says Berend Voslamber, geese researcher with bird research organization SOVON. 'In those days people were just starting to appreciate nature. Geese were one of the first species to be protected.' The restriction on hunting caused the number of geese overwintering in the Netherlands to shoot up, explains Voslamber. There are eight times as many 'goose days' – the number of geese multiplied by the number of days they stay – now than there were thirty years ago. That is due not solely to growing populations, but also to longer stays: the geese are arriving earlier and earlier and leaving later and later for their breeding grounds in the far north.

According to researchers at SOVON and Alterra (part of Wageningen UR), the rising geese population is also due to the abundance of food on Dutch farmland. The growing season is getting longer, and yields per hectare are increasing. This means there is food available for longer on the farmland, and the geese make good use of it. The birds have also put new foods on their menu, such as the leftovers from the maize and sugar beet harvests. To make matters worse, more and more geese are spending the summer in the Netherlands: they have become permanent residents in fact. This is probably because of the excellent food supply in combination with the many nearby nature areas in which the geese can brood in peace. So the agricultural damage caused by summer geese has also more than tripled since 2006. The main culprits are the greylag goose, the barnacle goose and the exotic Canada goose. In ten years, numbers of these species have increased by ten times, to more than 250,000 birds.

### RUINED CROPS

Summer geese are an absolute disaster for farmers, says Toon Voets, a geese expert with the Dutch society for the protection of birds. 'For the individual farmer, the damage from summer grazing is much greater than that from winter grazing. On top of that, it's an emotional business for the farmer to see his lovely crop being ruined by geese. That creates a big problem before you even mention the money side of things.' According to Voets, it is the summer geese that cause the most problems. The nuisance caused by the winter geese is manageable, he thinks. Not least because the number of

## TRENDS IN GEESE NUMBERS AND LENGTHS OF STAY IN THE NETHERLANDS



overwintering geese seems to have stabilized, and with it the extent of the damage they do.

**BACKUP CULLING**

Since 2001, when shooting overwintering geese was banned outright, farmers have been able to claim for damages to the Fauna Fund. Two years later, in an effort to control rising costs, the Dutch government introduced foraging areas, in total 80,000 hectares spread across the country, of which 65,000 hectares were farmland. Winter geese were to be allowed to graze undisturbed in these areas, but were to be chased off land outside them.

‘The idea is to teach the geese where they are allowed to graze and where they are not’, explains geese researcher David Kleijn, from Alterra. Farmers who want to cooperate on the foraging areas get a fixed payment for this as long as they also make sure the overwintering geese get enough food. Any damage is compensated by the Fauna Fund. Kleijn: ‘By working with a fixed payment, the government had more of an overview of the financial situation.’

Outside the foraging areas, it is compulsory for farmers to chase off the geese if they want to qualify for damage compensation. This is difficult to check up on, but in practice most farmers do their best to chase the geese off their land. By any means possible, including ‘backup culling’ of greater white-fronted geese and greylag geese. At least 100,000 geese are shot every year.

In spite of the new measures, the total costs of sheltering overwintering geese have doubled to more than 19 million euros per year, according to an Alterra report.

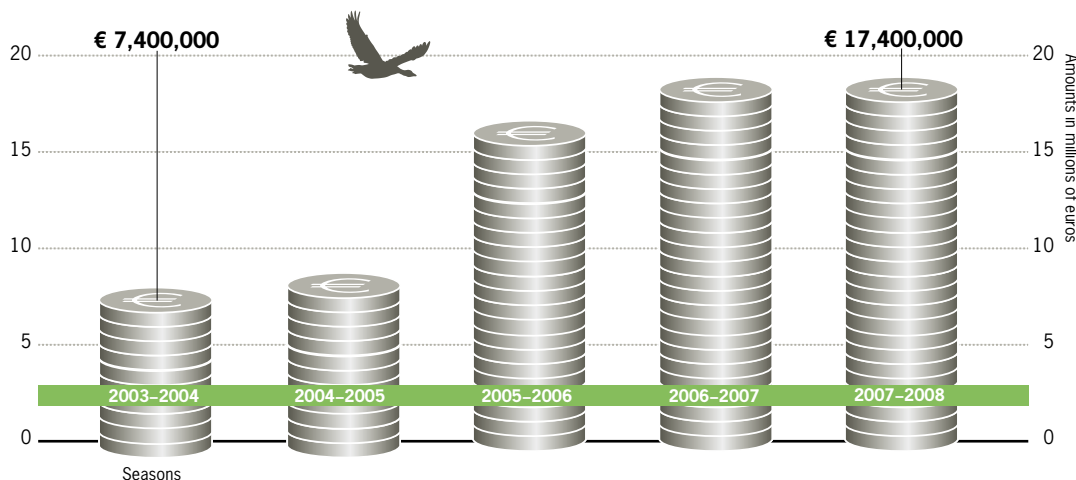
Remarkably, the amount of damage has stayed the same,

while the fixed payments to farmers account for much of the rise in costs. There is also a lot of criticism of the policy of designating foraging areas, as more than 40 percent of the geese forage in ‘out of bounds’ areas. One of the reasons for this, says Kleijn, is that ‘the geese always weigh up the food supply in an area against the risks they take by being there. So you have to ask yourself how much effort will have to go into scaring the geese away from particular areas.’

Bird protection expert Toon Voets agrees that foraging areas do not work well. The main issue, he says, is that there are far too few of them to cater for the food preferences of the various species of geese. Greylag geese and greater white-fronted geese prefer longer grass and once they have grazed one meadow, they move on to another one. Then the barnacle geese keep the grass short, so that this field is no longer of interest to the graylag and white-fronted geese. ‘In the end, a patch of land like this doesn’t provide enough food for these species and they trek from one area to another’, explains Voets. ‘Like that you end up with not enough suitable land.’ So the greylag geese are responsible for a large proportion of the damage: more than 40 percent. And the white-fronted and barnacle >

‘Culling is not an effective way of limiting the damage’

**COST OF HARBOURING GEESSE AND PAYING FOR DAMAGE**



geese are responsible for thirty and twenty percent of the claims, respectively. Voets reckons that, to work properly, the foraging areas would have to cover at least 150,000 hectares, rather than the current 80,000 hectares. Peter de Koeijer, director of the agricultural and horticultural organization LTO, is more impressed by the foraging areas. And he thinks the designated 80,000 hectares ought to be enough. 'But then they should be sown with more nutritious food sources', he asserts. 'Clover would be very suitable.' Another condition for successful foraging areas is to be strict about chasing the birds off the

surrounding land and, even more importantly, to drastically reduce the summer geese population. They are the real troublemakers, says De Koeijer. 'Half of the overwintering greylag geese and about 20 percent of the barnacle geese are summer geese', he says. 'Once the real overwinterers have gone in March, the summer geese start grazing the crops, which are extra vulnerable at that point.' De Koeijer thinks that ten percent of the present summer goose population would be about right for the Netherlands. 'Then you are talking about a few tens of thousands of birds.'

### 'A DRAMA FOR NATURE'

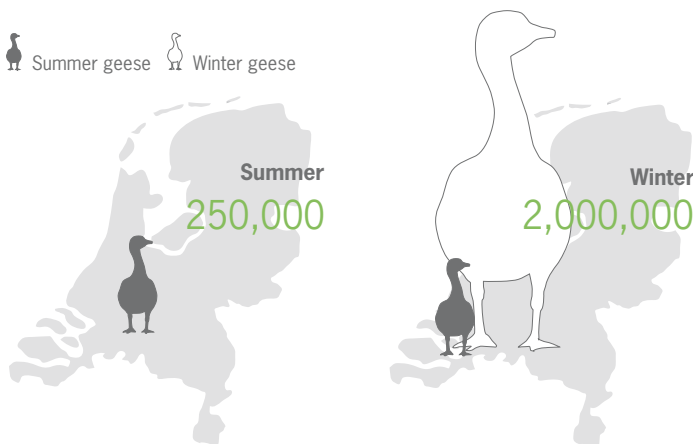
It is not just the farmers in the Netherlands who are suffering from the goose population. Jurjen Annen, ecological manager with nature conservation organization *Natuurmonumenten* at the Vechtplassen lake area, sees for himself the damage done by the summer greylag geese in particular. 'Twenty years ago *Natuurmonumenten* had hardly any geese in the Vechtplassen area, and now there are just under four thousand', he says. 'A drama for nature here.' When the birds are moulting they keep to the reed beds and strip them bare. As a result, the reed beds are disappearing and the breeding grounds for rare species of heron such as the great and little bitterns are shrinking dramatically. With the rise of the summer goose, these species are therefore dwindling rapidly, as are the great reed warbler and the black tern. It is true that catching moulting geese is permitted by the provincial authorities, but Annen does not think the public would stand for it. 'We cannot afford to lose members', he says. So *Natuurmonumenten* adopts the strategy of collecting eggs. 'It seems to help, but not enough', says the nature manager. 'The population goes on growing at quite a rate.'

### CUTTING COSTS

In order to cut the costs of the damage done by geese, the Agricultural Economics Institute LEI (part of Wageningen UR) calculated the costs of several policy options. Cutting the winter goose population by 15 to 30 percent would lead to savings of 11 to 19 percent, says LEI. Kleijn does not think this would be effective, if only because culling is such an enormous job. For the white-fronted geese alone, you would have to shoot between 150,000 and 300,000 birds. Not to mention 35,000 to 70,000 greylag geese. Besides the logistical difficulties of doing this, the researcher says it would disturb a lot of other animals. 'If you want to harvest the animals, this is a good way to go about it, but culling is not an effective way of limiting the damage', claims Kleijn. He believes it is the conditions in and around the breeding grounds that are causing the growth in the winter geese population. If 20 percent of the geese in the Netherlands are shot, a smaller population will return to the breeding grounds. There, more of the young will reach adulthood, because their chances of



### GEESE NUMBERS IN THE NETHERLANDS per season



### FAVOURED FORAGING GROUNDS FOR GEESSE

The areas where geese forage in winter are increasing in number and size. They already cover about 25% of Dutch land.



survival will go up with a lower population density. In short, this is what the Dutch call ‘mopping with the tap open.’ What is more, you would have to shoot hundreds of thousands of geese every year. And such a massive reduction of the population is undesirable, says Kleijn, in view of the obligation the Netherlands has to host the geese. ‘About three quarters of the entire European population overwinters here. If you decimate that every year, you won’t exactly make a good impression abroad.’

### YOUNG GEESE

So what is the answer then? ‘We can think up all sorts of measures, but we don’t have the knowledge to really predict their impact’, says Kleijn. ‘To get an idea of the future scale of the winter geese problem, the main thing is to assess the carrying capacity of the Arctic breeding grounds, and then you know what you are up against.’ Many species of geese expanded their breeding areas when the population grew after hunting was banned. There is a limit to that expansion. Once you know what that limit is, you can remove most of the uncertainty around the goose population growth and with it the uncertainty about the maximal costs.

Breeding success is equally crucial to keeping the summer geese under control. Because the young geese trek from their breeding grounds to the food-rich meadows of the Netherlands, their breeding rate is kept artificially high. ‘The nature areas themselves should determine the carrying capacity and the breeding rate of the geese, and not the surrounding farmland’, says Voets. ‘You should therefore keep the young geese out of the nature areas – by fencing them, for example.’

‘There are far too few foraging areas’

LTO director De Koeijer agrees that the carrying capacity of the nature areas should determine the numbers of summer geese, but he thinks fencing them would be hypocritical. Better, he says, to shoot adult geese on their nests, with a gun with a silencer. ‘There is a taboo on active goose population management, but it is needed, even in the Natura 2000 areas’, he claims. But researcher Kleijn thinks fencing might not be a bad idea. ‘It’s an effective measure for limiting chick survival.’ SOVON researcher Voslamber sees another option. ‘In the Ooijpolder, large areas of the water meadows are grazed by cows and horses all year round. Like this the area turns to wilderness and there is less suitable grass for geese. That reduces chick survival too.’

According to the society for the protection of birds, the best solution is the simplest: leave the geese in peace so that grazing pressure is more evenly distributed over the Netherlands and the damage is less for the individual farmer. The society would ideally like to go back to the situation of ten years ago. Voets: ‘There was no hunting then and farmers were simply compensated for damage. There was a lot less fuss that there is now.’ ■

### GEESE IN THE NETHERLANDS

Five different species of geese overwinter in the Netherlands. The white-fronted goose is the most numerous, with almost one million birds. Other species that spend the winter months in the Netherlands are the barnacle goose – 360,000 birds, the greylag goose – just under 300,000 birds, and about 150,000 pink-footed geese. A relatively new phenomenon is the presence of summer geese, which do not leave for the Arctic circle in the spring, but stay in the Netherlands to breed. In total, there are about 250 thousand summer geese, most of them greylag geese. Their summer numbers have increased from 30,000 to almost 200,000 within ten years. The population of barnacle geese grew in the summer from 4,000 to more than 35,000.



**Greater white-fronted goose**



**Barnacle goose**



**Pink-footed goose**



**Greylag goose**



**Brant goose**

