

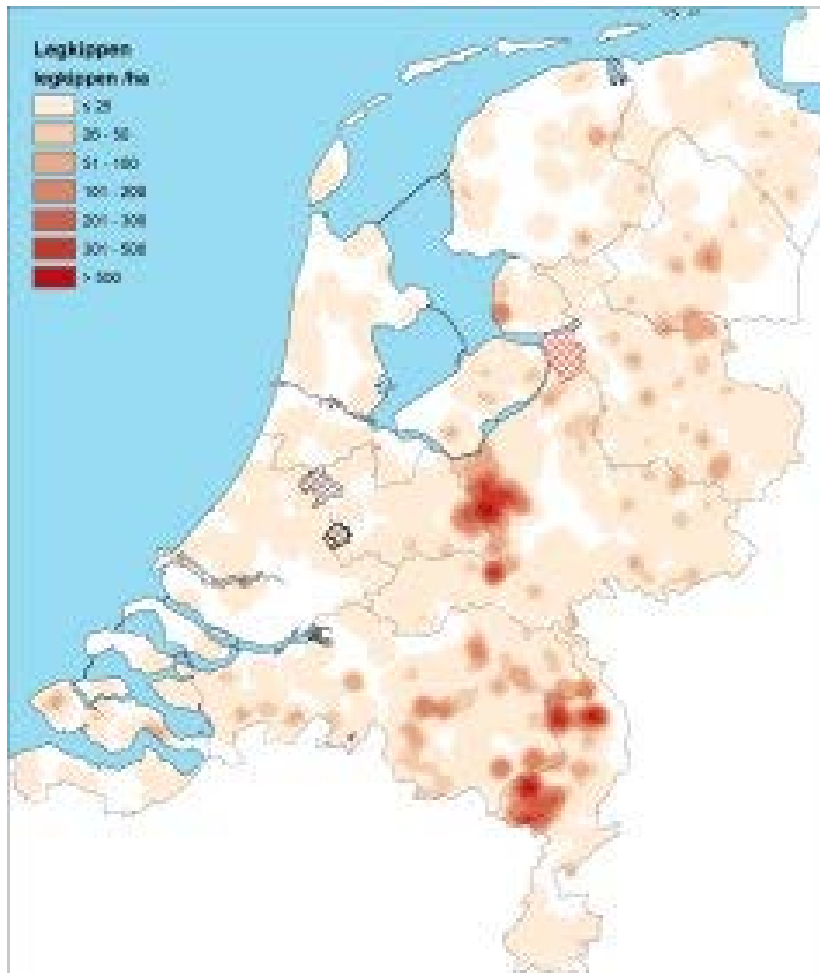
# Avian Influenza in The Netherlands

Disease control and animal welfare

August 2017, Ferry Leenstra

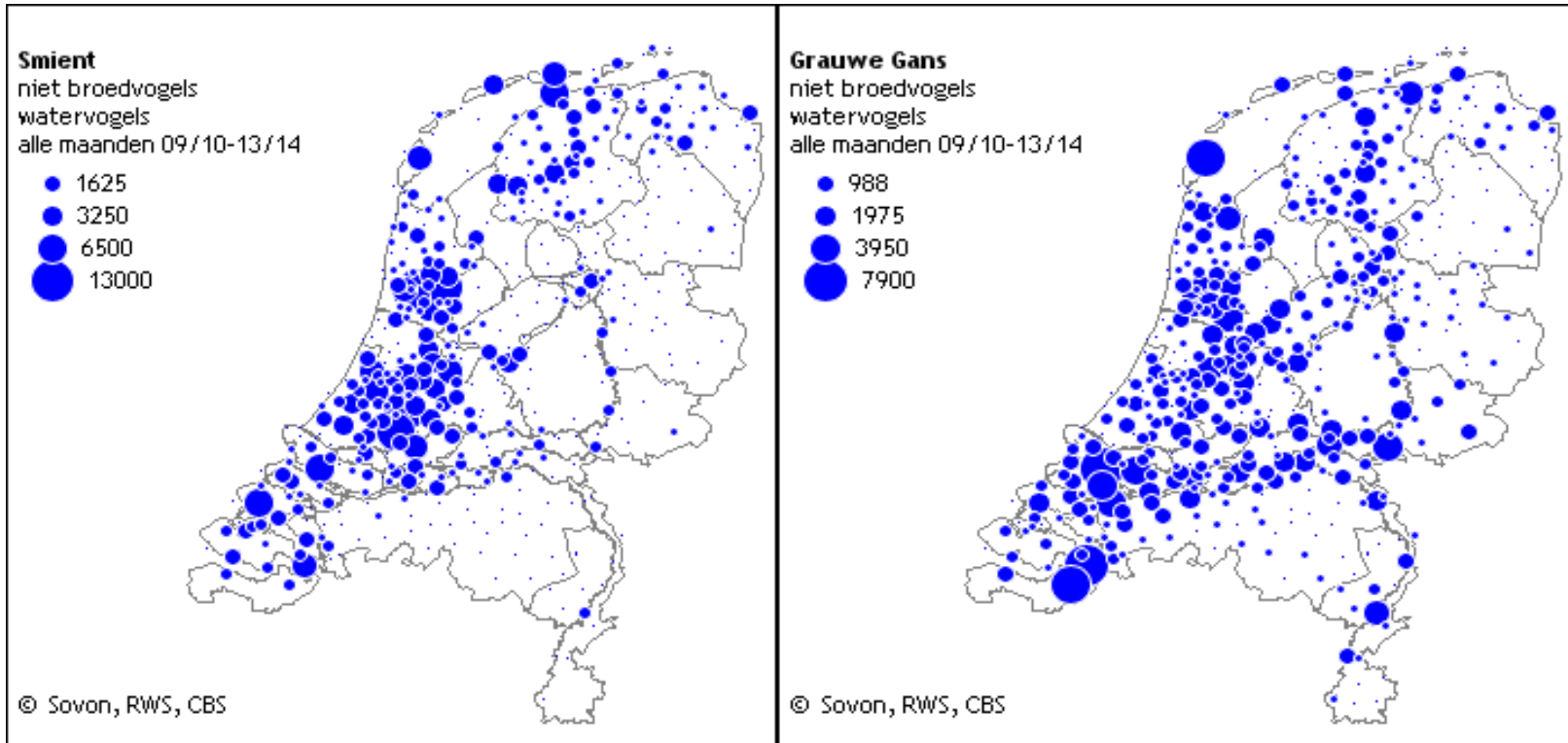


## Density of laying hens in The Netherlands



Over 50% of the country is 'waterfowl area', with large water surfaces and lots of grassland and winter wheat as foraging area.

# Presence of two waterfowl species



# Recent outbreaks of HPAI in The Netherlands

- 2016/'17      H5N8
  - 9 farms, 220.000 birds (all independent, 2016)
  - 10 hobby locations (last in March 2017)
  - 46 wild birds (last in May 2017)
  - 10 farms culled as precaution, 500.000 birds
- 2014            H5N8
  - 5 farms, 4 independent introductions,
  - 1 secondary infection
- 2003            H7N7
  - Major outbreak, 250 farms infected > 1000 farms culled
  - 30 Million birds killed, pet poultry included

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# AI in The Netherlands

LP AI is found regularly on commercial farms, 7-11 times more often on farms with free range than on other farms

Free range farms are a high risk (mutation of LP AI to HP AI)

LP AI found: farm is culled

Outbreaks of HP AI in 2014 and 2016/'17 were related to wild (water)fowl and not to LP AI

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# Controlling AI (and other notifiable diseases) in The Netherlands

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- Shared responsibility of (poultry) sector and government
- Legal framework of measures
- Detailed script on monitoring AI-situation and how to handle in case of suspicion of HPAI is discussed and pinpointed in 'peace time' and followed exactly in case of an outbreak
- The costs of measures are estimated and set for a 5 year period. Sector and government are each responsible for 50% of the costs. If the costs are higher than estimated, these extra costs are for the government. If the money is not spend, the sector can use the money as a (reserve)fund for the next five year period.

# Farmer is obliged to

- Report on everything that might point at AI-infection (or other notifiable diseases) immediately to veterinarian

Increase in mortality, drop in feed or water consumption, drop in egg production

- Each farmer has a contract with a veterinarian
- Veterinarian is obliged to report on suspicion of AI and other notifiable diseases
- All farms with outside access (free range, organic) and duck farms are monitored every 3 months for (LP)AI
- All other farms are monitored at least once per year
- Wild waterfowl is monitored according to a schedule (birds found dead)

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# Standard hygienic procedures

- Farm area is fenced in with clear visible barrier for visitors
- Free range area is fenced in
- National registration of where-abouts and transfer of all birds
- Registration on farm of all visitors/visits
- Advised to provide visitors with clothing and boots
- Disinfect lorries (feed, animals) before leaving the farm
- Have a licence or a contract with a licenced company for vermin control



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# Increased risk

HPAI found in wild waterfowl in or close to The Netherlands

Outside access of fowl prohibited

Farms with outside access (organic and free range) all have a covered/protected 'wintergarten' area

Organic eggs keep their status, free range eggs lose their status when birds have to be kept inside >12 weeks (will be changed in >14 weeks)

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# When AI suspected on a farm

- No traffic to and from farm until fast (PCR) diagnosis by reference institute
- PCR positive: blocking of farm and no transport of all animals and animal products in 10 km area around farm
- Dependent on the situation region or nation wide stand still
- Preparation culling process started
- Confirmation of diagnosis → culling starts as soon as possible (within 4 hours after diagnosis)

# Next steps

- Sampling and culling of all commercial poultry in 1 km area, sampling and fast diagnosing of all farms in 3 km area
- Typing of virus, tracing research, sampling and culling of all contact farms outside 3 km area
- No visitors allowed at any poultry farm
- Only one to one transport at any poultry farm

Farmers are compensated for culled flock: 100 % for live, healthy birds, 50% for sick birds, 0% for dead birds

Incentive to report as early as possible

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# Culling process

- Culling process, save disposal of carcasses, material, vermin control and disinfection of infected farms is tendered to a dedicated company for a contract period of 5 year
- Company has to be ready 24/7 to start culling within 4 hours after notice
- Netherlands Food and Consumer Products Safety Authority supervises everything in the culling process

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# Culling methods

For commercial poultry only two methods allowed

- CO<sub>2</sub>-suffocation in the house
- CO<sub>2</sub>-suffocation outside the house in containers (big bags)

For welfare reasons CO<sub>2</sub>-suffocation inside the house is preferred. CO<sub>2</sub>-suffocation in big bags outside the house only when inside is not possible due to construction of the house or with very young birds

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# Decisions on measures

The Ministry is advised by a committee of experts on risks for human and animal health and epidemiologists

In their advise human and animal health has priority

Animal welfare is weighed against economic consequences

f.i. on keeping chickens inside

Transport regulations in closed areas

Hatcheries: one day old chicks, hatch and kill them or stop the incubation process

Broiler farms: transport to slaughter facilities

Transport of other animals and animal products than poultry

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# Controlling animal welfare

Netherlands Food and Consumer Products Safety Authority is responsible; during culling a veterinarian is continuously present and can take immediate action when welfare of the animals is at stake. But, human health and prevention of spreading of virus has priority

An independent committee has access to all culling activities and advises directly to the Minister on improvements in procedures

The committee also advises on other measures to combat an outbreak

# Experiences

- The crisis organisation (Ministry, NVWA and executing company) are well trained and have ample experience
- Farmers cooperate in early warning, accept hygienic and culling regulations: the risk of between farms transfer of AI is reduced considerably compared to 2003
- CO<sub>2</sub>-suffocation in the house is an animal friendly method, provided that specialised equipment is used to warm the CO<sub>2</sub> while bringing it in the house
- CO<sub>2</sub>-suffocation outside in big bags works adequate, but catching and carrying of birds is a welfare risk (and very heavy work for the staff concerned, because of protective clothing)



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# Next steps

- Examine if a foam blanket is acceptable for culling, to replace the big bags. A foam blanket is accepted in the UK, but causes very wet carcasses, which is a problem in collecting, transporting and destroying the carcasses in a safe way

## Free range poultry a save option?

- Search for alternatives for free range as the period with AI-positive waterfowl is increasing (currently HPAI in Italy, China, HPAI wild birds found end of May in NL)
- Vaccination inevitable?



Full screen image with title







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# Red mite and Fipronil in The Netherlands

August 2017, Ferry Leenstra



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# Fipronil in eggs, what happened?

- Red mite is a significant problem for all layer and reproduction farms
- Since about 2007 nicotine forbidden in the EU
- Many things tried, but no easy solutions
- Company X offered treatment with etheric oils and alcohol. Treatment was effective and farmers recommended the company to each other
- Company X obtained the substance from company Y
- In June eggs were found with fipronil
- Tracing revealed Company X as the source, the treatment substance was proven to contain fipronil

# Fipronil in eggs, what happened?

- All 180 farms that used Company X are blocked and eggs are examined.
- 1 farm with high risk eggs, 73 farms with too high levels for children
- Recall from shops and export
- Millions of eggs destroyed
- Company Y also had contacts in UK, Poland, Germany, France, but from those countries not yet results



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# Fipronil in eggs, lessons learned

- GMP-certificate is not sufficient
- Red mite is a huge problem and deserves more attention

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Thank you for  
your attention

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Questions,  
comments?

