

Influence of IBR-control in cattle trading pattern?

S. Ribbens, P. Geens, W. Van Praet, E. van Mael, E. De Graef, H. Deschuytere
Animal Health Care Flanders (DGZ), Lier, Belgium www.dgz.be

IBR control in Belgium

A main influencer of the spread of IBR (Infectious Bovine Rhinotracheitis) is the trade of **latent carrier-cattle (BoHV-1 infected)**. Starting from the 1 of January 2012, Belgium takes up national IBR-control through **certifying IBR-free herds and hyper-immunisation in non-certified free herds, coupled with trading rules at purchase (phase I)**. From 2016 onwards, non-certified free herds should perform **annual screenings** to determine their IBR-infection status & marking BoHV-1 infected animals for canalisation to slaughter (**phase II**). From May 2018 onwards, **trade of animals originating from non-certified free herds is restricted (phase III)**.

	2012	2013	2014	2015	2016	2017	2018
% Certified free herds	25,0%	27,0%	30,1%	35,5%	52,5%	67,2%	86,2%

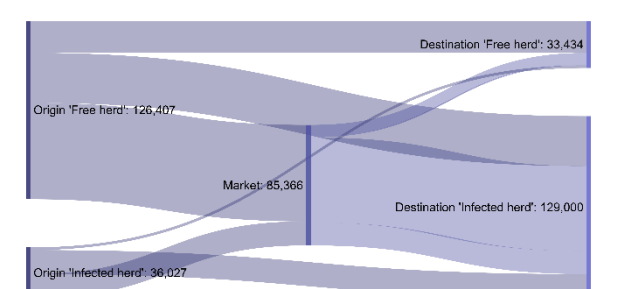
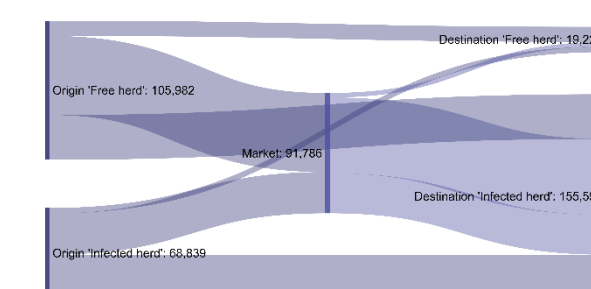
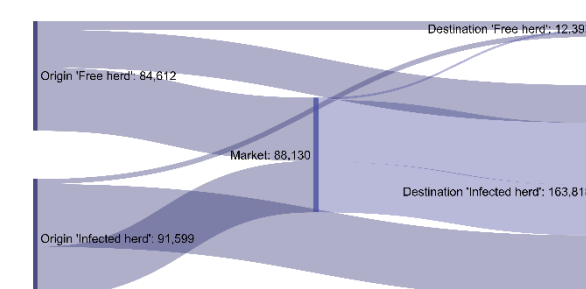
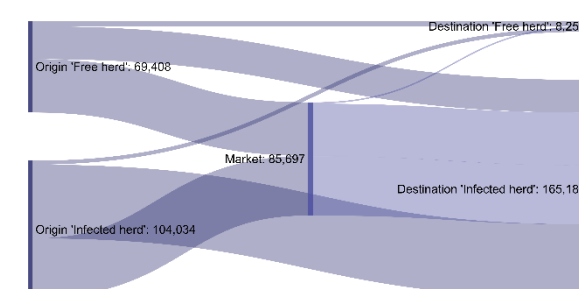
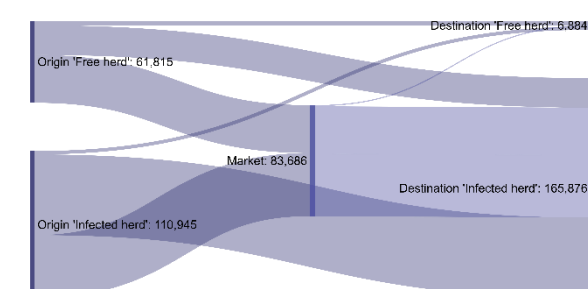
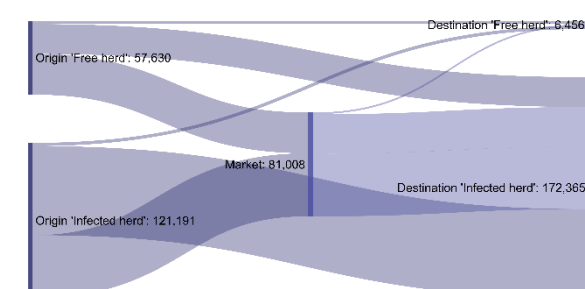
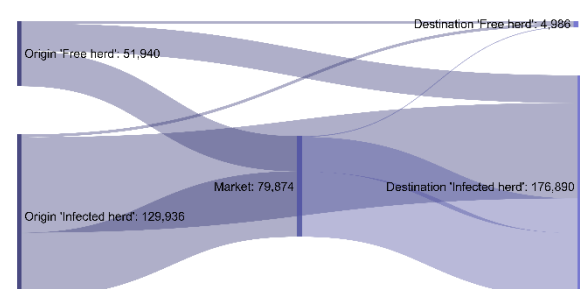
Phase I

Phase II
screening

Canalisation of
BoHV-1 infected
animals for
slaughter.

Phase III
Trade
restrictions

Shifting trading
patterns

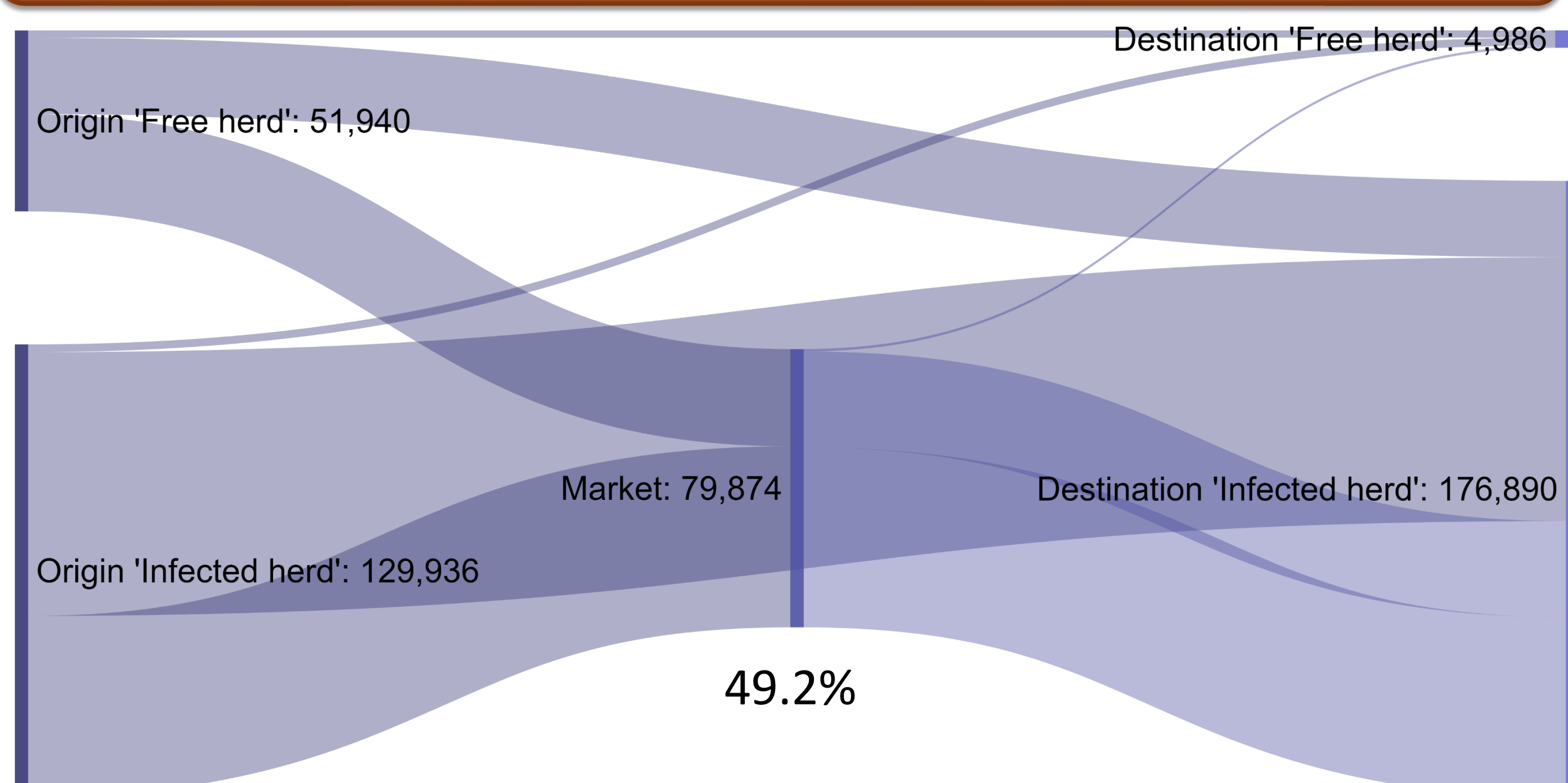


Estimated
vaccination
coverage*

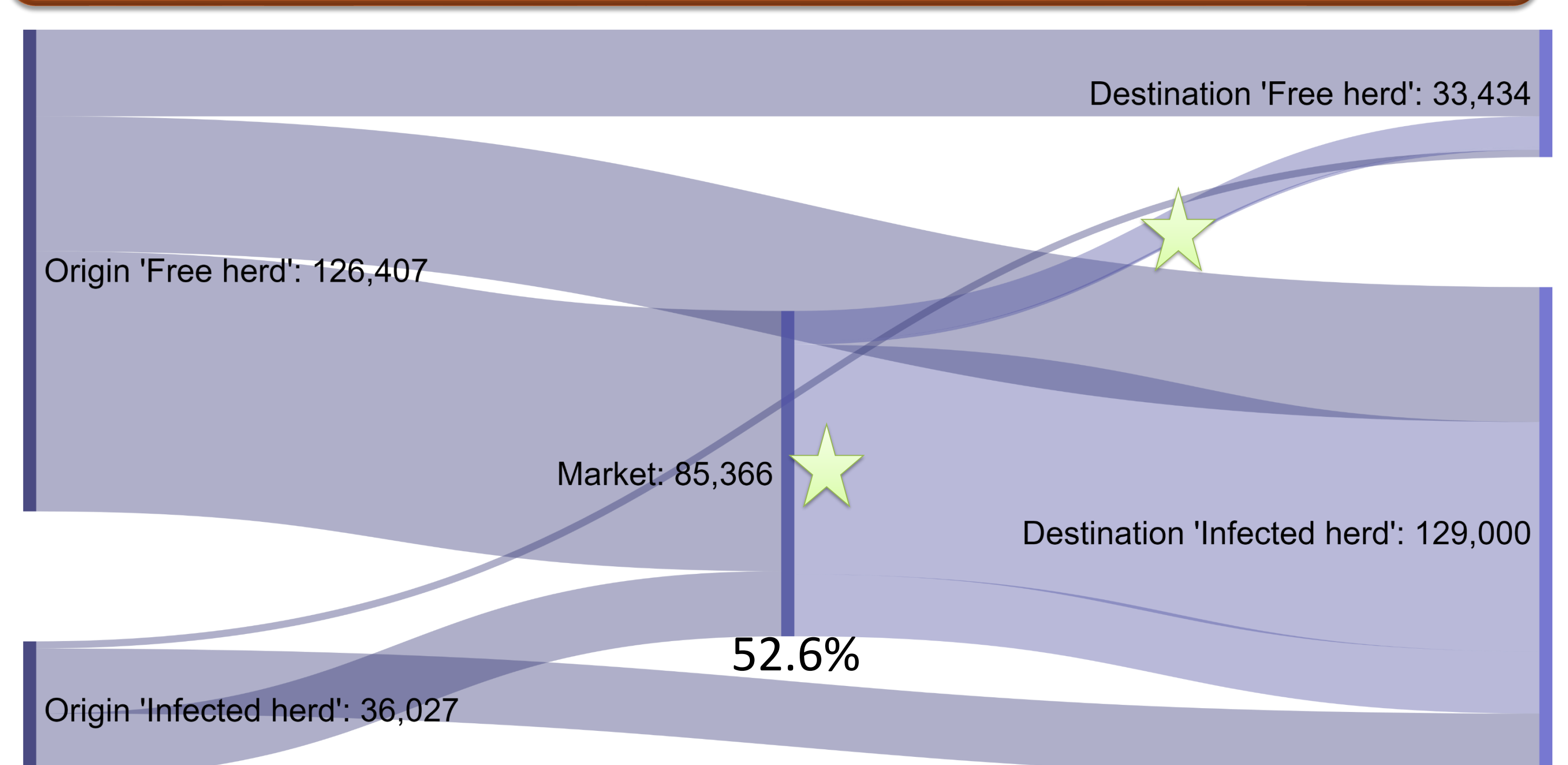
80%?

20%?

Trade pattern 2012



Trade pattern 2018



Sankey graphs of registered cattle trade with destination in Northern- Belgium. 'Free herd': certified free within legislation – 'Infected herd': non-certified free herd applying hyperimmunization of cattle – 'Market': cattle trading places. N (2012)= 181.876 – N (2018)= 162.434.

- 69.3% of traded cattle originate from 'potentially infected herds' (not certified free)
- 97.4% of traded cattle is bought in 'non-free herds'

- 77.8% of traded cattle originate from free herds
- 79,4% of traded cattle is bought in non-free herds
- Marginal increase in direct trade from 'free'-> 'free'

An increase in certified IBR-free herds in 2016-2017 was necessary to alter cattle trading patterns, which are/were mainly driven by economics and habits. The remaining non-free herds (15%) are obviously the largest 'traders' (hence their status). Phase IV of the IBR-programme should eliminate 'risky behaviour' of animal gatherings ('markets'), where commingling of infected animals and naive animals is still possible, especially with the decrease in the level of immunisation in certified free herds.