



Monitoring animal welfare problems in fallen stocks

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Fallen Stock

Bodies of dead farm animals not intended for human consumption

- Died from diseases/injuries or have been killed for certain reasons

Potential source of risks to public and animal health

- Have to be disposed properly in animal waste processing plants (AWPP)
- Category 1 and 2 – used for combustion, bio fuels, fertilizer

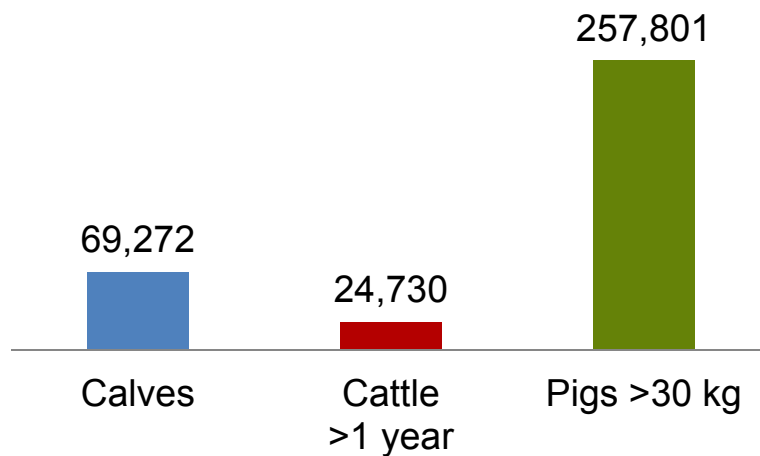


Fallen Stock in A

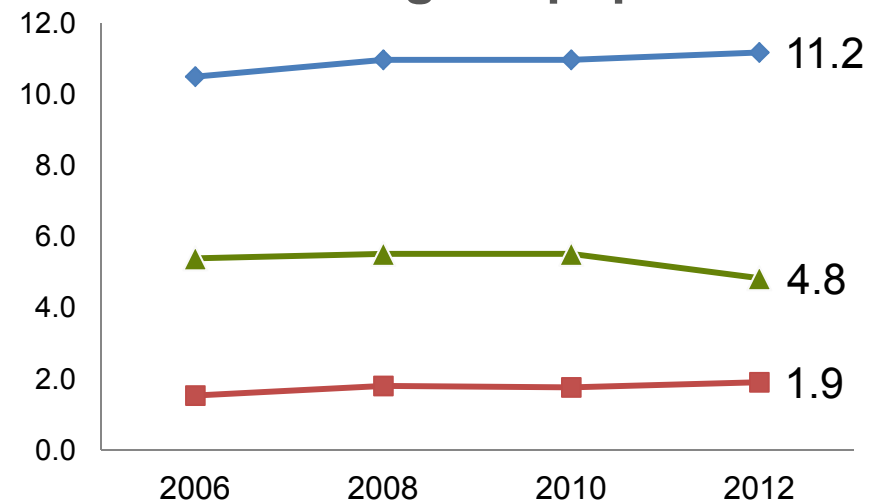


2013: 376.832 fallen stock
32.844 tons (BMG, 2014)

Number of fallen stock in 2013

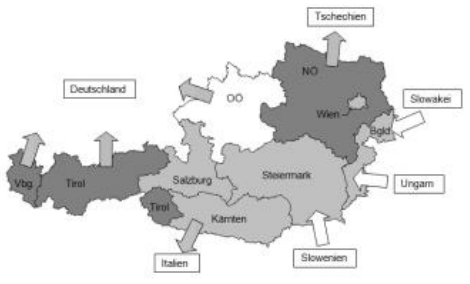


Percentage of population



- High loss rate, increase over time
- 2.331.150 fallen animals (EFPRA members of EU14, EFPRA 2014)
- Database incomplete (i.e. cadavers <30 kg not included)

Fallen Stock - Processing



Hidden suffering

- Some fallen animals die miserably !
 - Lack of knowledge how to treat and kill moribund animals
 - Herd size, economic pressure, housing condition, ...
- Little evidence on welfare problems of fallen stock
- No control in animal waste processing procedure

Initial Study 2011

100 vans (1070 cattle and 987 pig cadavers) inspected at 1 Austrian AWPP

Fallen Cattle (Klager, 2012)

- 124 cadavers (12.5%) with one ore more signs
- Adult cattle > calves (59 % vs. 3 %)
- Decubitus, extreme dirtyness, bad body condition



Fallen Pigs (Mlak, 2012)

- 203 cadavers (20.8%) with noticable signs
- Bites, decubitus, bad body condition



Fallen Cattle



Fallen Pigs



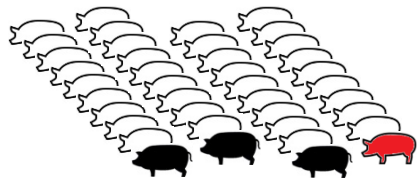
Objectives and Methods

I. Re-examination/verification of study Klager and Mlak



- Inspection of 43 vans using modified protocol
- Only moderate and severe pathological signs (non mild)
- + Focus on signs of proper killing

II. Development of a feasible monitoring system

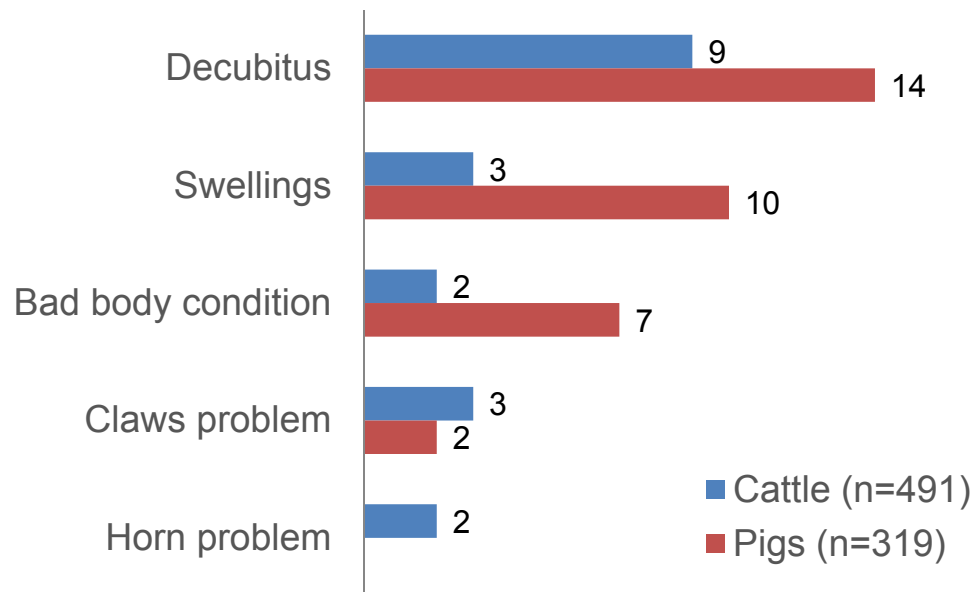


- Concept
 - Protocol for drivers
 - Training of drivers
 - Testing and validation
-
- Done by 2 vet students (diploma thesis) at 2 Austrian AWPP

Results Re-examination

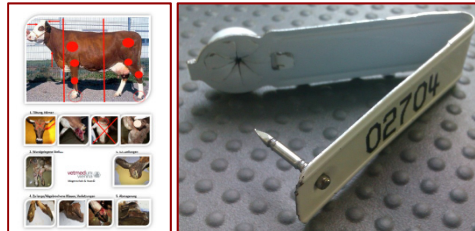
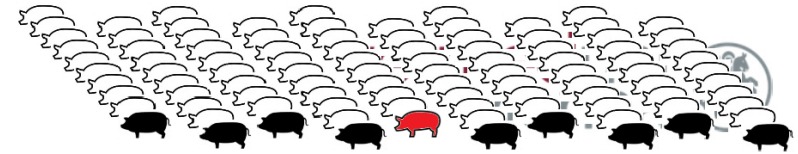
43 vans with 491 fallen cattle and 319 fallen pigs >30kg

- 22 cattle (4.5 %) and 25 pigs (7.8 %) noticed



- Improper killing in 14 of 22 noticed cattle and in 1 of 25 pigs

Our Monitoring Concept



Ear tagging of suspect cadavers by trained drivers

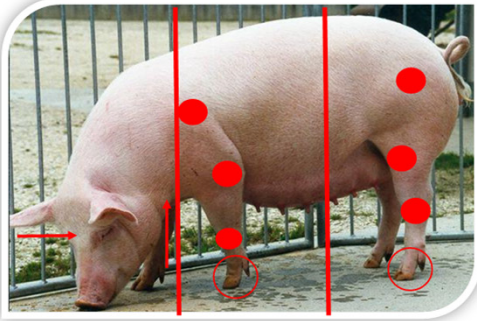


Final evaluation of pre-selected cadavers by official vets at AWPP





Feed back to farmer training and/or consideration


Protocol for Drivers




1. Tötung



2. Wundgelegene Stellen



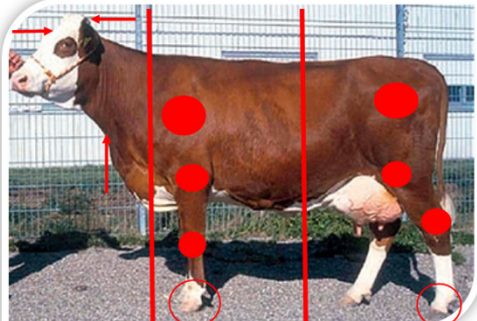
3. Schwellungen



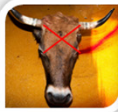



4. Zu lange/Abgebrochene Klauen, Verletzungen


5. Abmagerung




1. Tötung, Hörner





2. Wundgelegene Stellen



3. Schwellungen



4. Zu lange/Abgebrochene Klauen, Verletzungen

5. Abmagerung

vetmeduni
vienna
Magenschab, Haas,
Hofer-Kasztler, Baumgartner

Cattle and pigs

3 Regions

- Head
- Front
- Hind

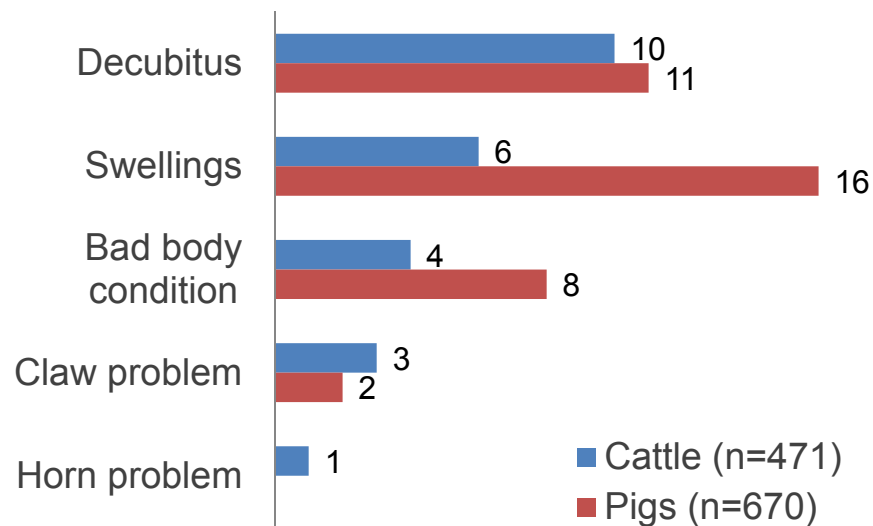
5 Symptoms

- Bad body Condition
- Decubitus
- Swellings
- Claws problems
- Improper killing

Only if severe!

Testing of Monitoring System

- With 16 trained drivers at 2 AWPP
 - 79 vans with 1141 fallen cattle and pigs
- 29 cattle (6.2 %) and 25 pigs (6.1 %) pre-selected by drivers
- 6 false positive and no* false negative cadavers found in final inspection



- Improper killing in 16 of 29 pre-selected cattle and 13 of 41 pigs

* Data only from 1 AWPP

Conclusion

- Suspicion of welfare problems in fallen stock substantiated
- Detection by pre-selection of suspicious fallen stock by trained drivers produced reliable results and little extra workload
- Implementation by veterinary administration + AWPP ?

Intensive training of farmers and vets in professional treatment of moribund animals + efficient monitoring system should reduce the number of fallen stock with obvious signs of prolonged suffering.

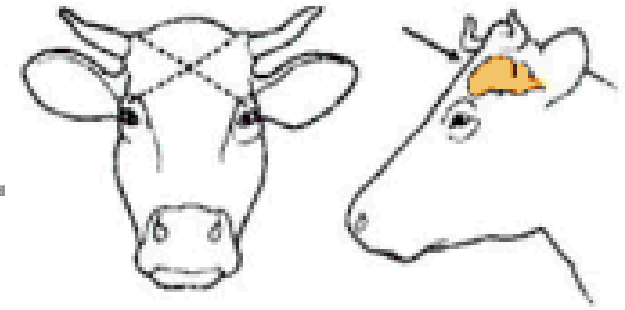
Many thanks to

- Alexandra Geier
- Melanie Mlak
- Michaela Klager
- Theresa Magenschab
- Kathrin Haas
- AWPP drivers
- Birgit Howorka
- Christoph Hofer-Kasztler

- you for your attention!



Proper treatment



Adequate therapy with reasonable effort!

→ no success → EUTHANASIA to prevent pain/suffering!



+



Stunning with captive bolt gun + bleeding by severing major arteries of neck