Monitoring animal welfare problems in fallen stocks

Johannes Baumgartner
Institute for Animal Husbandry and Animal Welfare
University of Veterinary Medicine Vienna
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 combustation, bio fuels, fertilizer
Fallen Stock in A

2013: 376,832 fallen stock
32,844 tons (BMG, 2014)

Number of fallen stock in 2013

- 69,272 Calves
- 24,730 Cattle >1 year
- 257,801 Pigs >30 kg

- 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 or more signs
- Adult cattle > calves (59 % vs. 3 %)
- Decubitus, extreme dirtyness, bad body condition

Fallen Pigs (Mlak, 2012)
- 203 cadavers (20.8%) with noticeable 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

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