



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Home Affairs FDHA
Federal Food Safety and Veterinary Office FSVO

1st meeting of National Contact Points on (EC) 1099/2009

26 - 27 May 2016, Parma

Feedback from Switzerland on Animal Welfare at Slaughter

Peter Jakob, Federal Food Safety and Veterinary Office
Switzerland



Swiss Legislation on AW at Slaughter

Present situation

Animal Welfare Act (2005, in force since 2008)

Animal Welfare Ordinance (2008)

Animal Welfare Ordinance at Slaughter (2010)

- with transition periods of 5 & 10 years

(for technical equipment – building modifications)



Ordinance of AW at Slaughter (2010)

Structure of the Ordinance

General requirements on

- Unloading (ramps)
- Lairage (incl. waiting periods)
- Care (access to water, etc)
- driving – handling (tools, curves)
- Restraint (head)
- Stunning (in annex, monitoring)
- Bleeding (=> min. 3 min.)





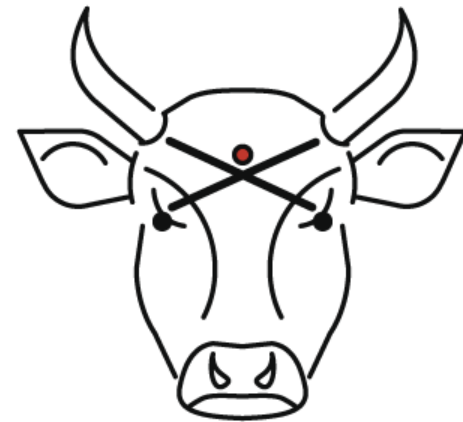
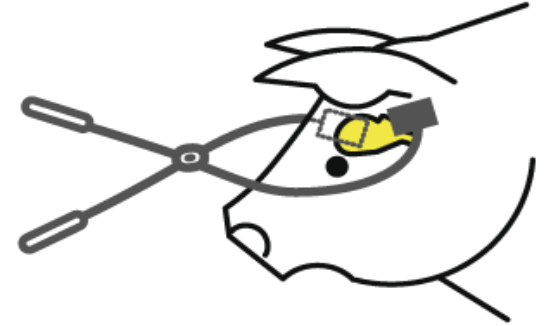
Structure of the Ordinance

Annexes:

Specifications for each stunning method and species/animal category:

- Stunning parameters (very detailed...)
- Surrounding requirements (restraint)
- Max. stun-to-stick-intervals
- Stun quality monitoring criteria

=> symptoms of unconsciousness





Benefits

- Responsibility with FBO; integration of AW in quality management of large slaughterhouses
- (Small slaughterhouses are more difficult to convince...)
- Improved training of slaughterhouse staff (collaboration effort, with official vets, meat industry and AW NGOs involved)
- Regular maintenance of stunning equipment; Sorting out of deficient devices (slow process!)

➤ **Increased awareness regarding animal welfare**



Challenges

- Most devices are built for the EU-market
- Manufacturers are reluctant to provide details
- Scientific expertise (mostly experts from outside CH)
- Training and support of official vets and cantons
- Training of slaughterhouse staff (language problems, course quality needs monitoring)



Ongoing work

- **Parameters** of electrical stunning (revision of ordinance)
- **Water buffaloes:** development of a new stunning device
- **Pregnant cattle:** commitment of industry,
 - => aim: declaration on food chain information document
 - => aim: no slaughter of animals in last 10% of gestation (?)
- Lobster (decapodes): electrical stunning (proposal Crustastun®)
- Fish farms: electr. killing (proposal for next revision)

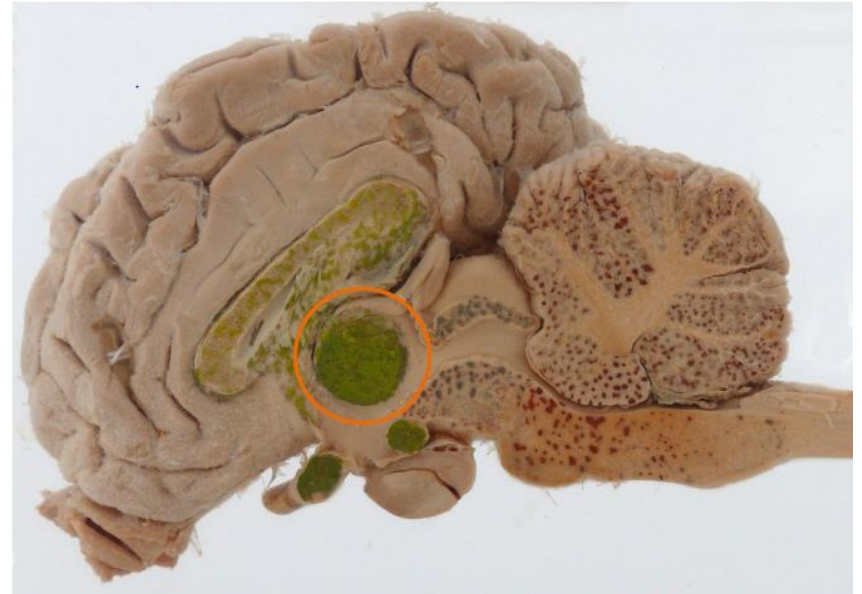


Water Buffalo – development of a new shooting device

- Doctoral thesis at Vetsuisse funded by FSVO
(Prof. M. Stoffel & collaborators)



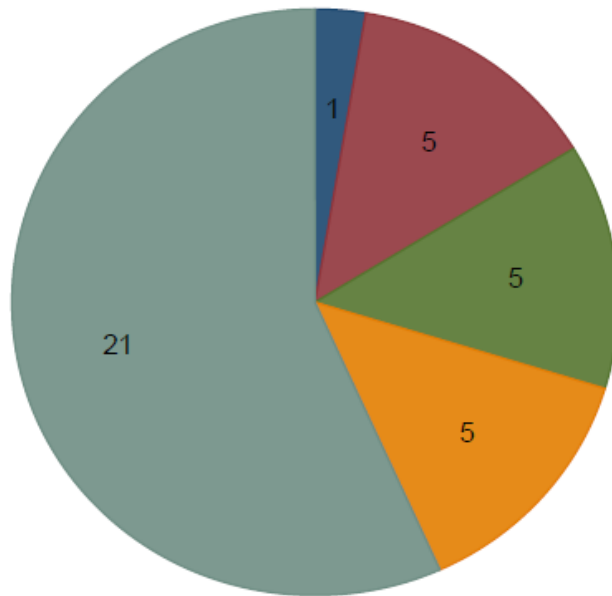
- Zielstruktur: Thalamus, Cortex





Water Buffalo: Stunning methods

Anzahl gescannter Wasserbüffel nach verwendetem Betäubungsgerät



- Luftdruckbetriebener Bolzenschussapparat
- Bolzenschussapparat (Bolzenaustrittslänge zwischen 121-125mm)
- Kugelschussapparat
- Pistole
- Revolver

Schwenk, 2013

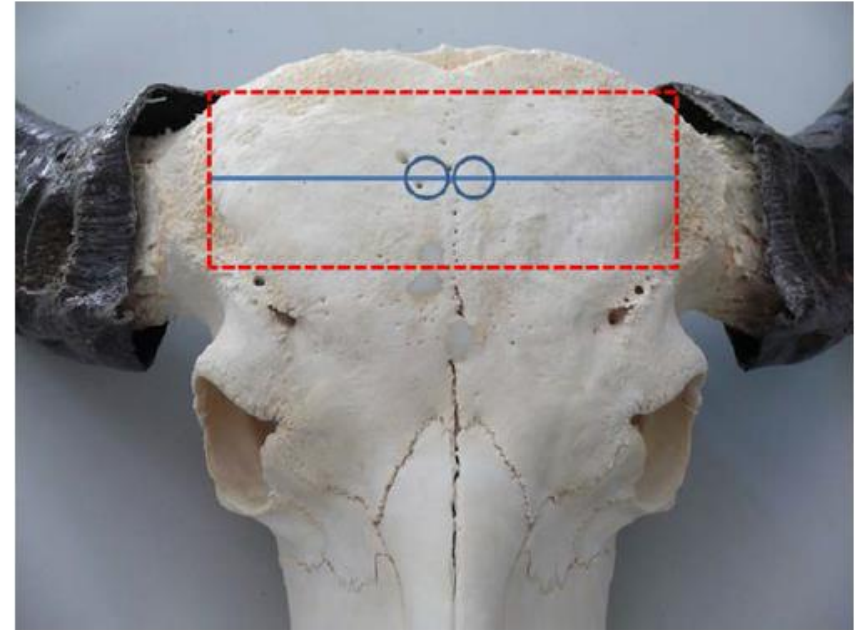
Firearms:
safety issue!

Pistols:
older males!



Frontal stunning position

Cave: septum



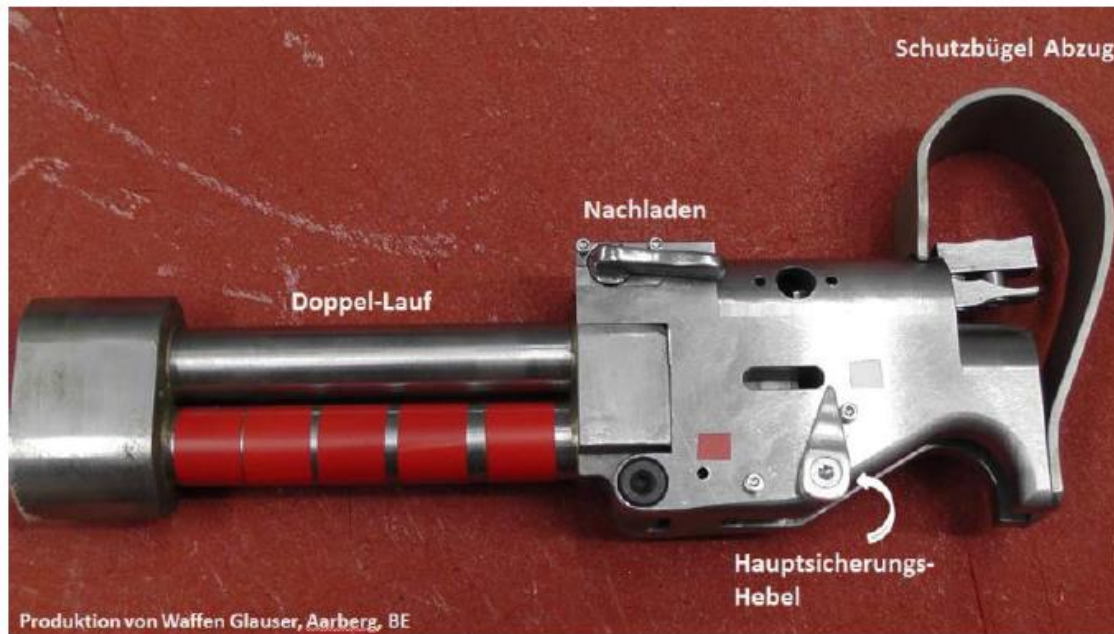
Alternative: occipital position; requires head fixation – not practical!



Bullet Apparatus

Ammunition

.357 Magnum (Mag), 10.2g Hollow Point (HP)
von Geco (Ruag Ammotec Group, Germany)
= spezielle Hohlspitz-Munition





Water Buffalo

Legal requirement:
bolt length for
water buffalo, yak
and heavy cattle > 800 kg
=> min. 12 cm

Stunners:
e.g. Cash magnum 12.1 cm,
Schermer KL 12.5 cm



Haut bis ...	Cavum cranii [cm]		Thalamus [cm]	
	3.6	2.9 – 4.4	7.4	5.6 – 10.0
Rind				
Wasserbüffel	10.2	10.1 – 12.1	14.5	11.7 – 17.2



Electrical Stunning - questions

Sows:

- 2 A necessary? => 1.8 seem to work as well...manufacturer insists on more flexible approach

Pigs and Sows:

- 50 Hz (head / heart)?

=> head: 500 – 900 Hz used...manufacturers offer a broad spectrum of pre-set programmes for parameters

=> heart: meat quality?

- Duration of stunning? => thongs for small slaughter houses



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Home Affairs FDHA
Federal Food Safety and Veterinary Office FSVO

Merci bien!