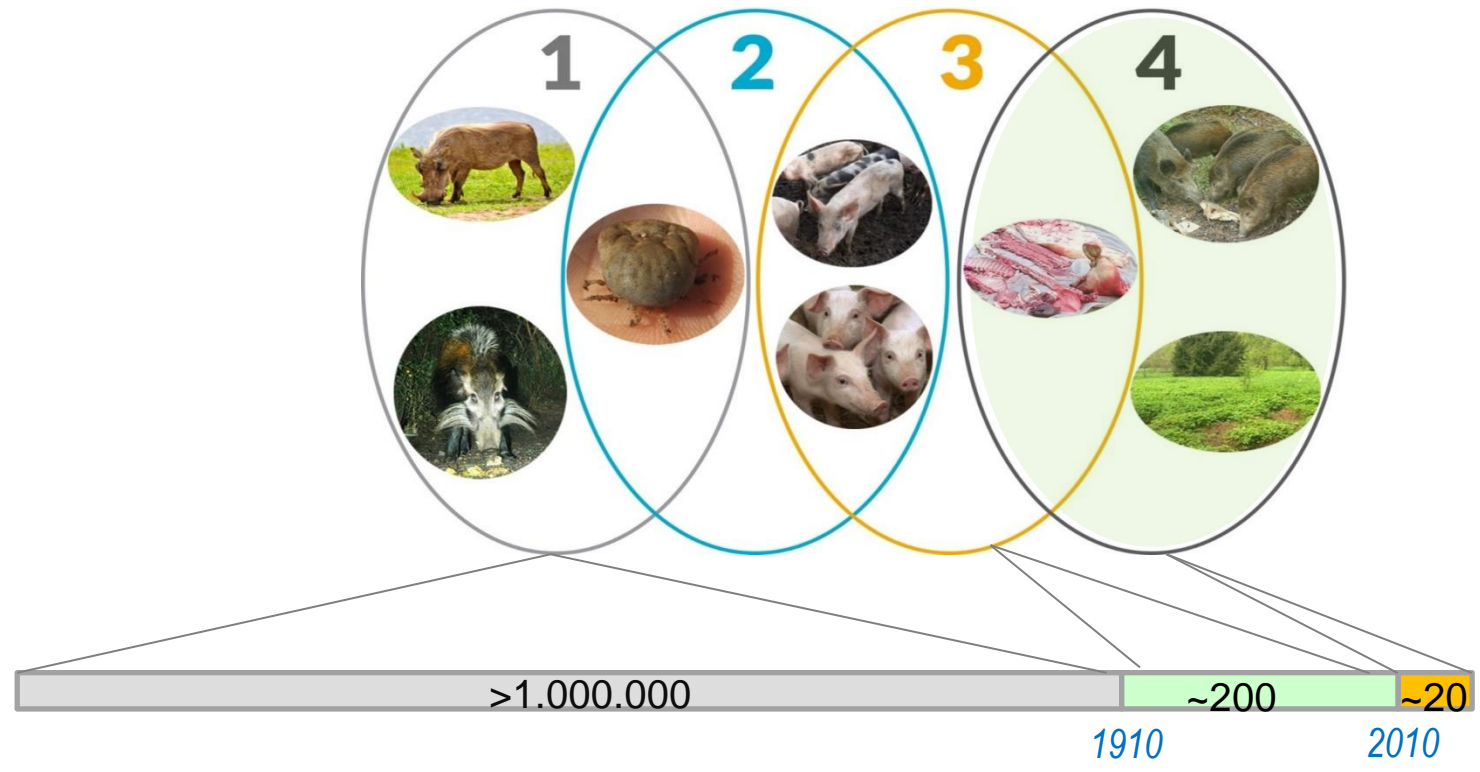


# *Some basic considerations regarding ASF control in domestic pigs and wild boar*

*C Haarmann, K Depner*

*SGE ASF16  
23 November 2020*

# A short history of ASF



# Characteristics of epidemics in wildlife populations

**Complex situation:** interaction of many factors

*(infected animals, animal density, hunting activities, agriculture, etc.)*

**Obscure situation:** not all important parameters are known *(e.g. animal density, animal movements, etc...)*

**Dynamic situation:** *permanent change of parameters (e.g. seasonal influences, fluctuation in animal number)*

Influencing one factor can cause unpredicted side-effects

# What's all about?

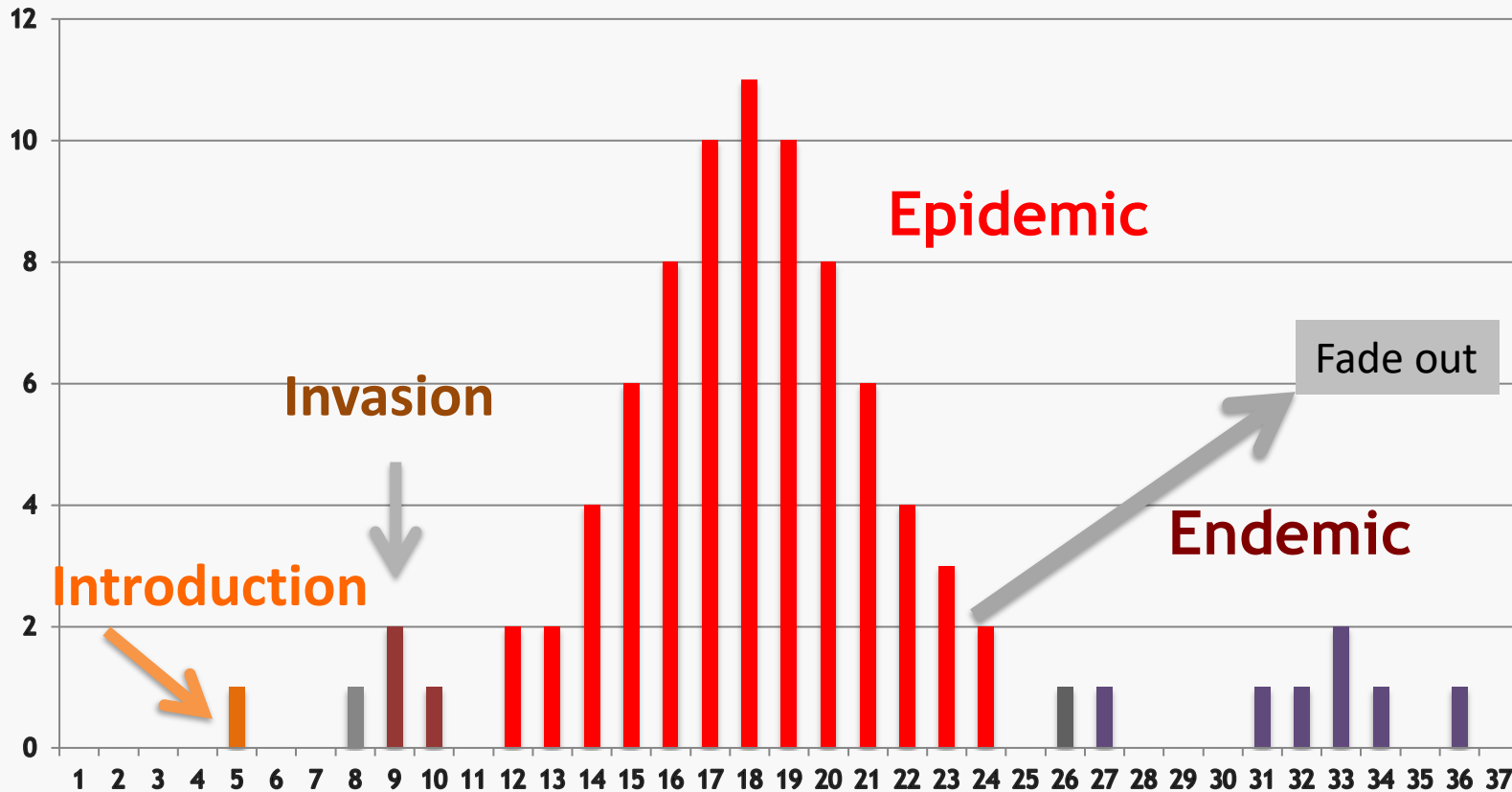
**A: Early detection >>> Passive surveillance**

**B: Disease control and eradication**

*Hunting strategy, biosecurity, feeding strategy, etc...*

- ***B works only when A works***
- ***A can only be successful when good passive surveillance***

## N. cases



Guberti et al (2018): Handbook on African Swine Fever in wild boar and biosecurity during hunting; OIE/FAO (GF-TADs)

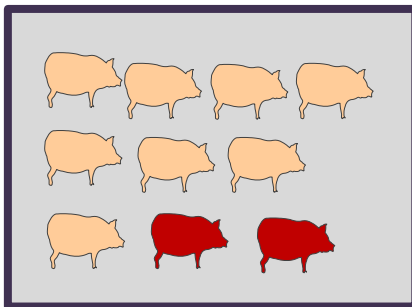
- **ASF is in the field not a highly contagious disease**
- **ASF in WB is a habitat disease**
- **ASF is a “slow” disease**
  - ASF did not fade out: **NO implosion**
  - ASF did not spread rapidly (Rabies-like...) **NO explosion**
  - Lethality high (>90%)
  - Starting mortality low (<5%)
  - Prevalence low (<5%)
  - Not necessarily a density dependent process

**Endemic in the region, slow spread**

## Key characteristics of ASF:

- low contagiousness, slow spread, few secondary infections
- no transmission by wind or insects,
- **site fidelity** (stable disease / habitat disease),

### DP: stable disease

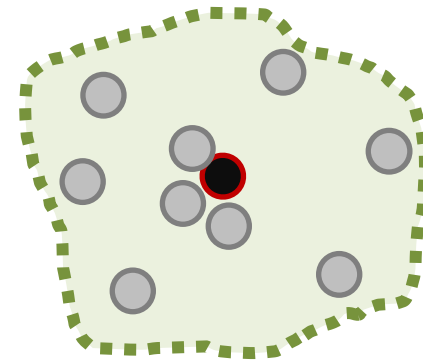


#### Measures:

1. Standstill
2. Culling
3. C&D

***Successful approach!!***

### WB: habitat disease

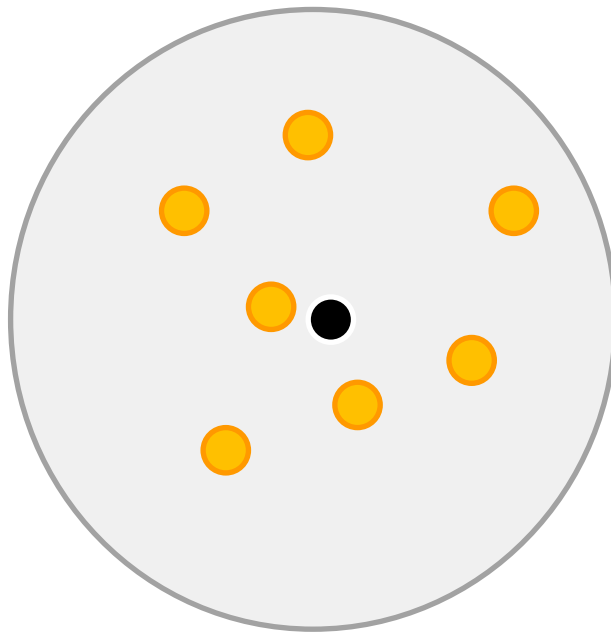


#### Measures:

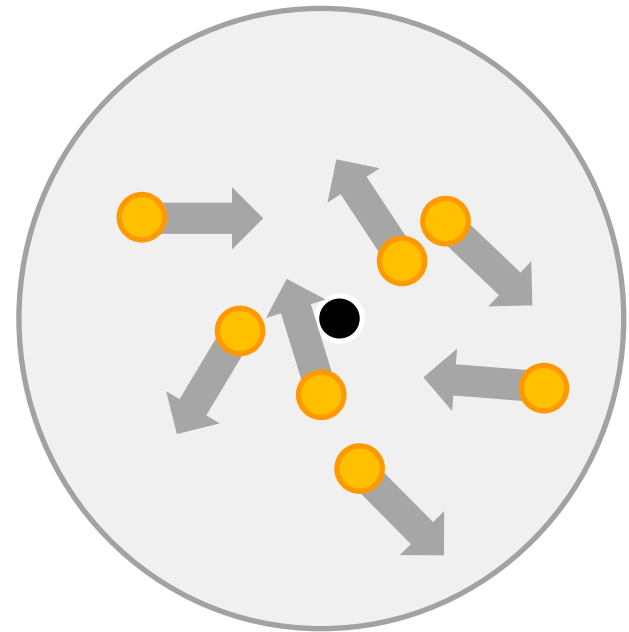
1. Standstill (no disturbance of WB, no hunting, electrical fence, (feeding)
2. (Trapping)
3. Disposal of carcasses

***“Virtual stable” in forest***

## Marbles in motion



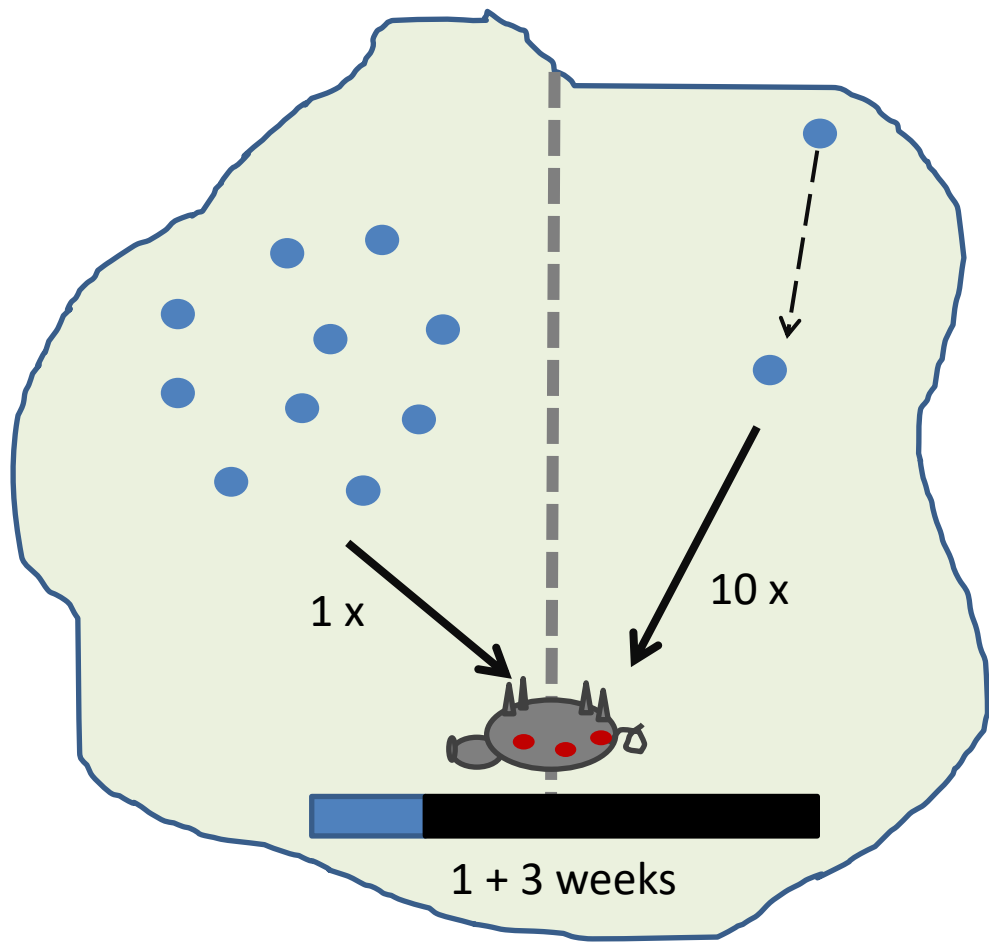
Contact rate +



Contact rate ++++



# Exposure opportunity

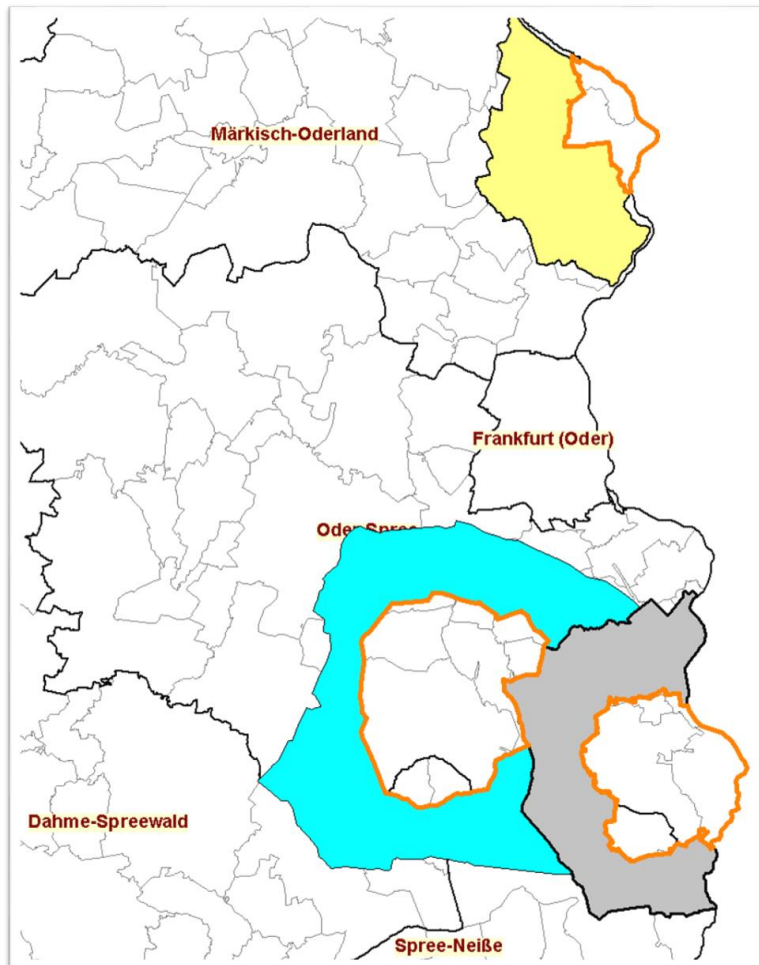


Carcass  
removal

- If carcasses will be timely removed, exposure opportunity will decrease -> less contacts
- If carcasses will NOT be removed, exposure opportunity will increase -> more contacts

# Concept of passive surveillance (carcass search) based on indicators

(V. Guberti & A. Licoppe -*EUVET*)



Estimating the number of carcasses/year originating from natural death (and car accidents) in a particular area (metapopulation)

*~ about 1% of estimated population should be found and tested -  
However, calculations always need to be adapted to the particularities of the region and wild boar population*

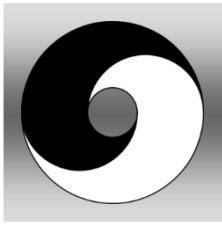
## Hardware



Money



## Software *(Mindset/Philosophy/Management)*



Education





*V. Guberti*



*„ ... the precautions now being exercised beneficially show that under the conditions at present existing the disease is one **which can in large measure be avoided**“*  
*E. Montgomery 1921*

# Targeted information campaign

- Main target groups: hunters, farmers, **travellers, long-distance driver**, hunting tourists, caregivers and nursing staff, veterinarians
- Media: posters, flyer, brochures, multi-language information material, FAQ's and further information on the website of the Federal Ministry, information in trains, infographics, social media and twitter
- Interviews and information in specialised press to pass deeper information to hunters and farmers
- Cooperation with other MSs and Switzerland
- Information campaigned exists since 2014 and was ever since deepened and enlarged





# ASP-information campaign of BMEL (targeted to hunters)

 **BMEL** @bmel · 21. Juli 2018

Aufruf an alle #Jäger und #Jägerinnen: Leisten Sie einen wichtigen Beitrag und verhindern Sie die Ausbreitung der Afrikanischen Schweinepest #ASP. Mehr dazu unter ⇒ [bmel.de/goto?id=4969494](https://bmel.de/goto?id=4969494)

### Afrikanische Schweinepest in Deutschland verhindern

#### Was können Jäger tun?



Verstärkte Bejagung ist eine Reduktionsmaßnahme gegen die Ausbreitung der Seuche.

[bmel.de](https://bmel.de)

7 17 23

 **BMEL** @bmel · 25. Juli 2018

Hinweis für alle #Jäger und #Jägerinnen: Legen Sie bei der Teilnahme an Jagden besonderen Wert auf Hygiene - reinigen Sie Ihre Ausrüstung gründlich und verhindern Sie damit eine Verbreitung der Afrikanischen Schweinepest #ASP ⇒ [bmel.de/goto?id=4969494](https://bmel.de/goto?id=4969494)

### Afrikanische Schweinepest in Deutschland verhindern

#### Was sollten Jagdreisende in ASP-Risikogebiete in Osteuropa beachten?



Alle Gegenstände, die mit Wildschweinen in Kontakt gekommen sein könnten, gründlich reinigen und desinfizieren.

[bmel.de](https://bmel.de)

1 12 13

 **BMEL** @bmel · 24. Juli 2018

Was können #Jagd-Reisende tun, um eine Einschleppung der Afrikanischen Schweinepest nach Deutschland zu verhindern? Informationen und Hinweise finden Sie unter ⇒ [bmel.de/goto?id=4969494](https://bmel.de/goto?id=4969494) #ASP

### Afrikanische Schweinepest in Deutschland verhindern

#### Was sollten Jagdreisende in ASP-Risikogebiete in Osteuropa beachten?



Keine Einfuhr von Teilen und Erzeugnissen von Schwarzwild.

[bmel.de](https://bmel.de)

1 10 3

 **BMEL** @bmel · 2. Juni 2018

#Jaeger aufgepasst: Achten Sie auf Fallwild, nehmen Sie bei Bedarf Proben & kontaktieren Sie das zuständige Veterinäramt – helfen Sie mit eine Ausbreitung der Afrikanischen #Schweinepest #ASP zu verhindern ⇒ [buff.ly/2kjSP6A](https://buff.ly/2kjSP6A)

### Afrikanische Schweinepest in Deutschland verhindern

#### Was können Jäger tun?



Auf Fallwild achten

Proben nehmen und Veterinäramt kontaktieren

[bmel.de](https://bmel.de)

15 8

# Thank you for your attention

For more information, especially to the information campaign please see:

- → [www.bmel.de/asp](http://www.bmel.de/asp)
- → [www.fli.de/de/aktuelles/tierseuchengeschehen/afrikanische-schweinepest](http://www.fli.de/de/aktuelles/tierseuchengeschehen/afrikanische-schweinepest)



# Summary of German situation

- first confirmation of ASF in wild boar in Germany on September 10<sup>th</sup> 2020 in district Spree-Neisse
- additional confirmations only in **wild boar** (found dead or hunted with or without symptoms) in districts Spree-Neisse, Oder-Spree, Märkisch-Oderland and Görlitz
- Three core areas in Brandenburg (Neuzelle/Sembten: 150 km<sup>2</sup>, Bleyen: 50 km<sup>2</sup> and Friedland: 230 km<sup>2</sup>)
- **Part II areas in Brandenburg** covering parts of four districts – Spree-Neisse, Oder-Spree, Dahme-Spreewald and Märkisch-Oderland: 1649 km<sup>2</sup>
- **Part I area in Brandenburg:** 2.232 km<sup>2</sup>
- **Part II area in Saxony** covering part of one district – Görlitz: 135 km<sup>2</sup>
- **Part I area in Saxony:** 309 km<sup>2</sup>
- pig holdings in restriction zones **BB**: 245 with appr. 60.000 pigs
- pig holdings in restriction zones **SN**: 28 pig holdings (6 empty) 73 pigs



# Measures in force in infected area

- Core area: public entering (pedestrians etc.) also prohibited
- Ban of any hunting and agricultural use (harvesting, foresting)
- Search for carcasses by people, specially trained dogs and drones
- notification system for carcass findings
- Sampling and safely disposal of carcasses by trained teams
- Preliminary E-fencing of the initial core area
- prohibition of free-range dogs
- Investigations on whereabouts of harvested crops
- bonus for notification of carcass findings (100-150€)