



# EFSA

## Latest developments on African Swine Fever

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ALPHA

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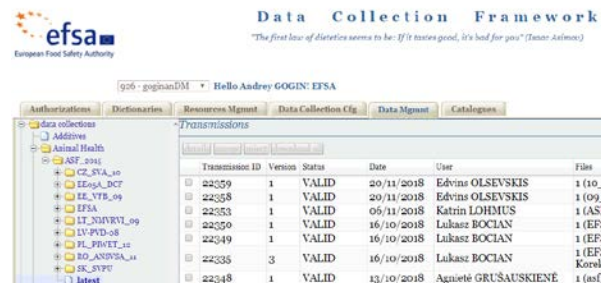
# SCIENTIFIC OUTPUTS AND TECHNICAL ASSISTANCE

## Technical assistance (EC and MSs)

- Harmonised laboratory data collection (2015)
- Involvement of MS's representatives
- Updated epidemiological analysis of ASF
- Assessment and review the management options for wild boar



- To assist in the fine-tuning of control measures



**Data Collection Framework**  
*"The first law of dietetics seems to be: If it tastes good, it's bad for you" (Tomasz Adamczak)*

grob - gogolanDM Hello Andrey GOGIN: EFSA

Authorizations | Dictionaries | Resource Mgmt | Data Collection Cfg | Data Mgmt | Catalogues

data collectors

- Addresses
- Animal Health
  - ASF\_2011
  - CZ\_SVA\_10
  - EEQA\_DCT
  - EE\_VTR\_09
  - EFSA
  - LT\_NDIRV1\_09
  - LV\_PVD-08
  - PL\_PVE1\_10
  - RO\_ASNVSA\_11
  - SK\_SVPU
  - latest

TRANSMISSIONS

Transmission ID	Versions	Status	Date	User	Files
22259	1	VALID	20/11/2018	Edvins OLSEVSKIS	1 (10_...)
22258	1	VALID	20/11/2018	Edvins OLSEVSKIS	1 (09_...)
22253	1	VALID	05/11/2018	Katrin LDHMUS	1 (ASE...)
22250	1	VALID	16/10/2018	Lukasz BOCIAN	1 (EFS...)
22249	1	VALID	16/10/2018	Lukasz BOCIAN	1 (EFS...)
22235	3	VALID	16/10/2018	Lukasz BOCIAN	1 (EFS...)
22248	1	VALID	13/10/2018	Agniete GRUSKAUSKIENE	1 (ASF...)



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## African swine fever

### Introduction

African Swine Fever: how to stay one step ahead

Поделись

# DESCRIPTIVE EPIDEMIOLOGY

## ASF situation in eastern Europe

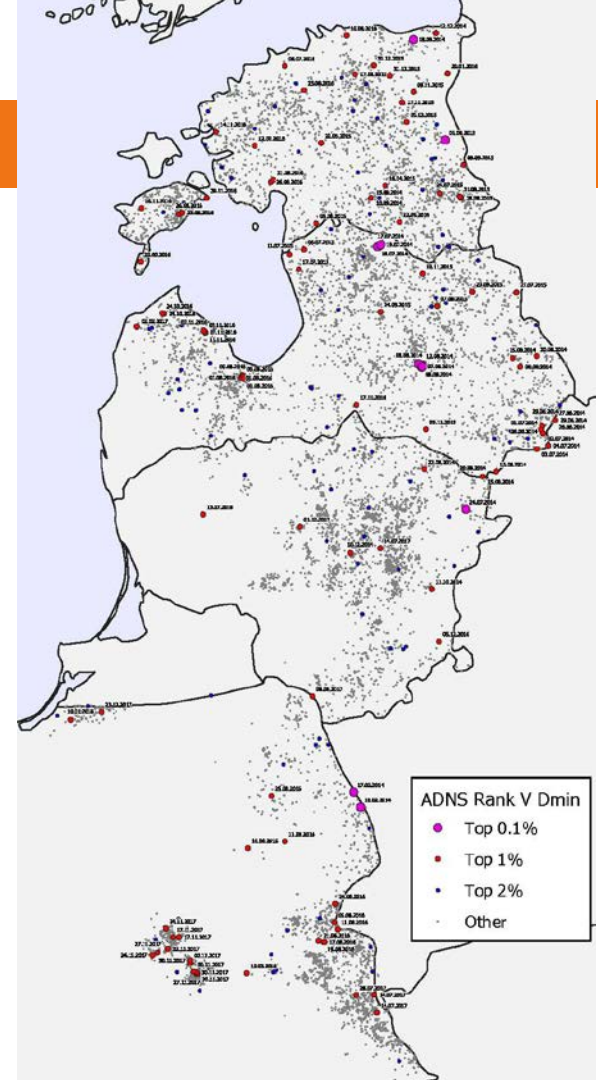
- **Localised epidemic**
- **Slow spread** from the epidemic front in a west- and southwards direction: median spread between 8 and 17 km per year
- Notably **slower** than some other infectious diseases in wild boar
- Continued sporadic detection of **cases** despite very **low wild boar densities**



# DESCRIPTIVE EPIDEMIOLOGY

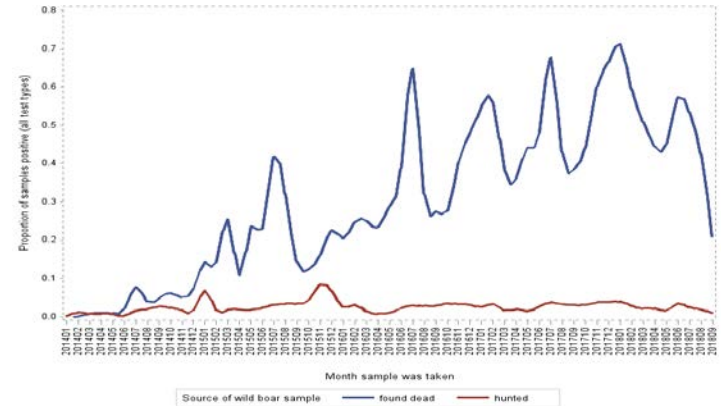
## ASF situation in eastern Europe

- **Jumps** of the disease have led to focal introductions of ASF - **human-mediated cases**
- **Wild boar-domestic pigs interface:**
  - direct contact mostly excluded
  - inadequate biosecurity
  - exact sources of introduction mostly unknown
- Focal introduction in the Czech Republic was apparently **controlled**



# DESCRIPTIVE EPIDEMIOLOGY

- Surveillance of dead wild boar (passive surveillance) is the most efficient method
- Proportions PCR positive samples are generally much higher than ELISA positive samples
- PCR or ELISA positive proportions in hunted remains low (below 5%)

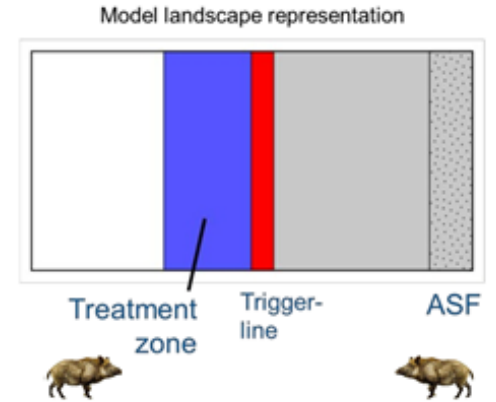




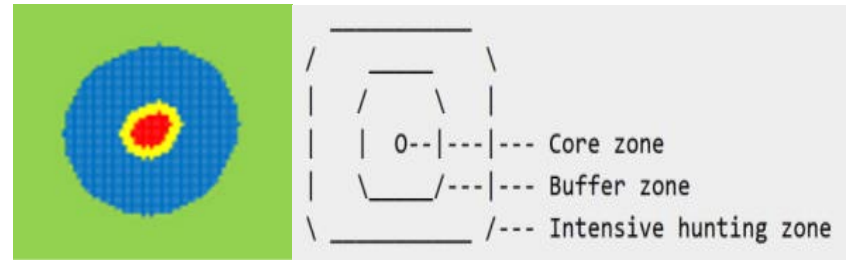
# ASSESSMENT OF MEASURES

- A spatio-temporally explicit individual-based model approach in structured geographic landscapes
- Combinations of the intensity of measures (**hunting, carcass removal, fences**) and the size of the zones
- Forward spread (A)
- Focal introduction (B)

A



B



considerable uncertainty about many aspects of ASF epidemiology in wild boar, including the carcass contact rate, the contact rate between groups, and the role of insects

# ASSESSMENT OF MEASURES TO STOP ASF SPREAD

- Intensive hunting in intensive hunting area applied as ONLY measure is both for the focal as the adjacent situation not effective unless it is applied  $> 80\%$  efficacy
- Combination of different measures together increases the chance of success in both situation (carcass removal, intensive hunting...)
- Carcass removal as early as possible (in all zones) increases chance of success in both situations



## RECOMMENDATIONS PREVENTION – FAR FROM ASF

- Control of borders
- Contingency planning
- Key role of **passive surveillance** for early detection
- Biosecurity (DP and WB) based on ASF epidemiology:
  - virus survival
  - human-assisted movement of virus
- Increase awareness (hunters, travellers)
- Long term options for hunting to stabilize wild boar population over large areas are needed
  - Limit carrying capacity and culling of wild boar

## RECOMMENDATIONS. PREVENTION. HIGH RISK

- Stabilize wild boar density
  - hunting,
  - highest achievable level,
  - urgent,
  - including protected areas
- Carcass removal
- Planned, systematic passive surveillance



Courtesy of P. Wagner

# RECOMMENDATIONS. EPIDEMIC. FOCAL INTRODUCTION

- Define areas (core, buffer, intensive hunting areas)
- Core and buffer areas:
  - WB population undisturbed
  - Carcass removal with high biosecurity
  - Following the decline in the epidemic – culling
- Intensive hunting area:
  - Drastic reduction in the WB population



## RECOMMENDATIONS. ENDEMIC (>1 YEAR)

- Surveillance objectives according to phases following ASF introduction (Active and passive surveillance)
- Ongoing hunting of wild boar populations (The age profile of seropositive animals should be assessed.)
- Passive surveillance and carcass removal
- Feeding ban, minimum baiting
- Further research to clarify:
  - the mechanism of persistence
  - to assist the interpretation of seropositivity
  - to define a pathway to ASF freedom following detection of the last known infected animal/carcass.



Courtesy of P. Wagner

## KNOWLEDGE GAPS

- There are significant gaps in knowledge about the epidemiology of ASF in Europe, including:
  - the carcass contact rate,
  - the contact rate between groups,
  - potential role of vectors in ASF spread
  - The exact sources of ASFV introduction in domestic pig farms
- Further research in each of these areas is recommended.
- Two new ASF mandates for 2019

# ASF STANDING WORKING GROUP

## Members

### **Christian Gortázar, Spain (CHAIR)**

Simon More, UCD, Ireland  
Klaus Depner, FLI, Germany  
Arvo Viltrop, EMO, Estonia  
Karl Stahl, SVA, Sweden  
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Francesco Berlingieri (EC-DG SANTE)

Thank you for your attention...

