



Federal Agency for the Safety of the Food Chain (FASFC)

# AFRICAN SWINE FEVER AMONG WILD BOARS IN BELGIUM

*Application of the EU ASF control and eradication in wild boar*



AG FESASS, 04/04/2019

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# AFRICAN SWINE FEVER IN WILD BOARS IN BELGIUM

## Plan

1. Introduction
2. Preparation
3. Chronology
4. Current situation
5. Eradication strategy - Measures
  - Pigs – Wild boars
6. Conclusions



# 1. Intro – Belgium, Federal State

## Distribution of powers

### Federal

- Food chain safety
- Agriculture - Sanitary (Domestic animal health etc.)
- Exports (sanitary aspects - SPS)
- EU and third country relations
- CVO - OIE delegate



### Regions

- Management of wild fauna, including animal health
- Hunting, Nature and Forests, Tourism
- Agriculture - Other than sanitary (Economy etc.)
- Animal welfare



## 2. ASF strategy – Preparedness

"Passive surveillance" => Wild fauna surveillance service  
– LAB



Last 2 years increase multiple collaboration initiatives were taken beforehand between the different ASF (potential-) concerned partners.



**Operational preparedness**

**Strong network between ASF (potential-) partners**

**=> RAPID DETECTION – RAPID RESPONSE**





# 3. Chronology

- ✓ 9/09/2018: 3 adult boars found dead in the town of Etalle
- ✓ 10/09: sick young boar slaughtered in the town of Etalle

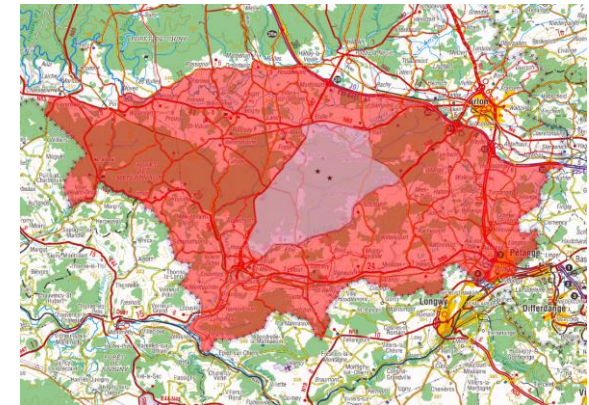
**"Passive surveillance"**

=> Wild fauna surveillance service – LAB

- ✓ 12/09 in the evening
  - Info by LNR (Sciensano) to CVO, FAFSC and Region: PCR PPA positive => confirmation tests scheduled for the next day
  - Internal info, Ministers, EU Commission, neighbouring countries etc.

- ✓ 13/09 at 9.30 a.m.: crisis meeting of FAFSC-Region, in touch with the EU Commission and Ministers
- => Delineation of **"infected zone"** (63,000 hectares) (**Provisional => 30/11/18 + Formalised by EU Decision**)

- ✓ 13/09 at 4 p.m.: Confirmation by Sciensano



# 3. Chronology

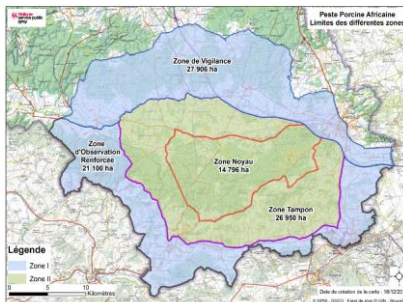
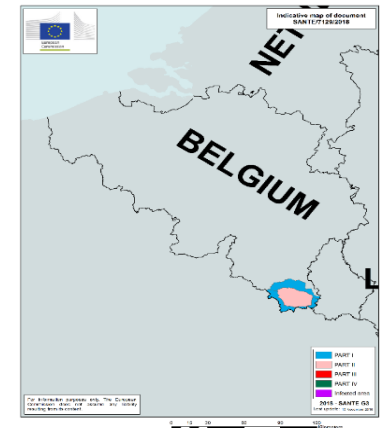
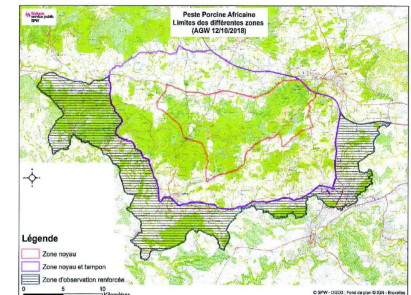
- ✓ 26/09 - 03/10/18: slaughter of pigs in the infected zone
- ✓ 12/10/18: delineation by the Walloon Region of 3 "operational" zones within the infected zone, with a view to the management of wild boars

2018 :

- kernel zone
- buffer zone
- reinforced observation zone



- ✓ 23/11/18: Adaptation European zoning
  - Delineation of zone I (buffer) and zone II (infected)
  - Region: delineation of a vigilance zone

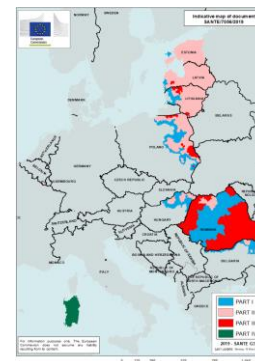
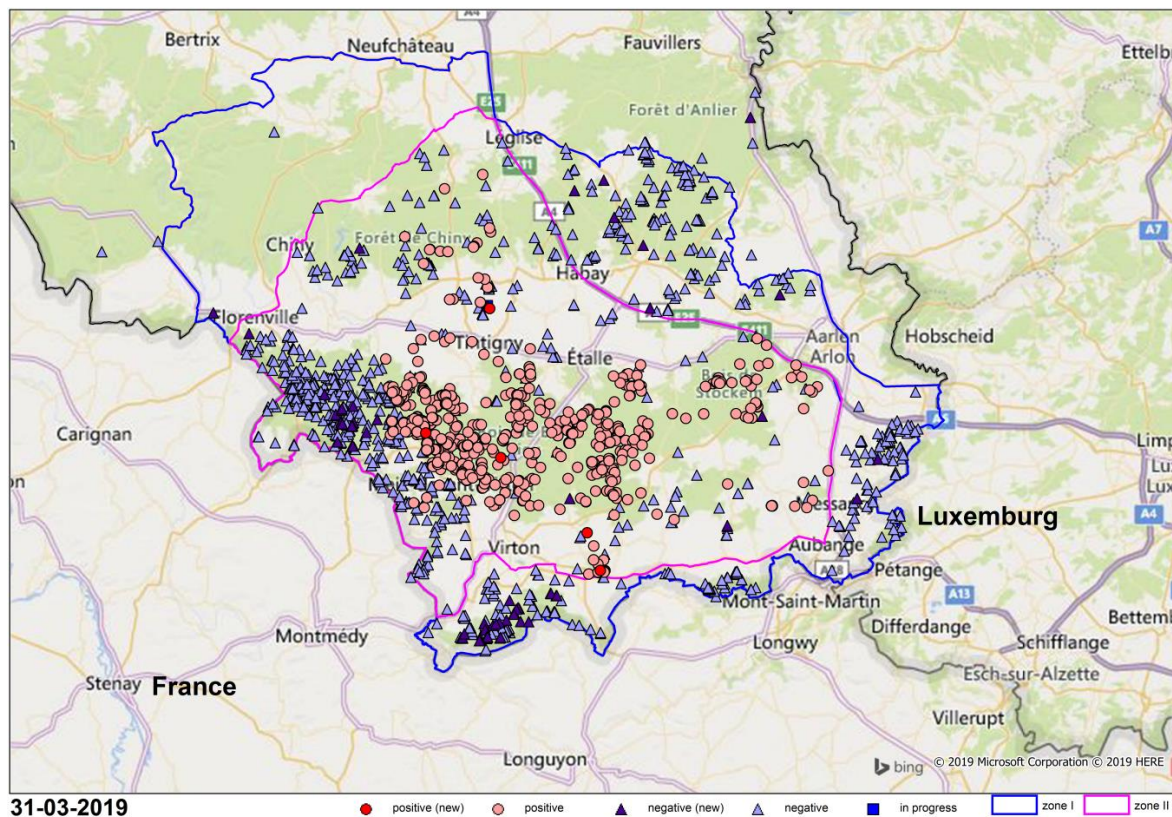


# 4. Current situation

As at 31/03/2019 ( **Wild boars, Walloon Region** )

➤ 2.111 wild boars found dead or shot were tested and analysed

- 2007 in the Zone I & II
- 713 positive, all in zone II



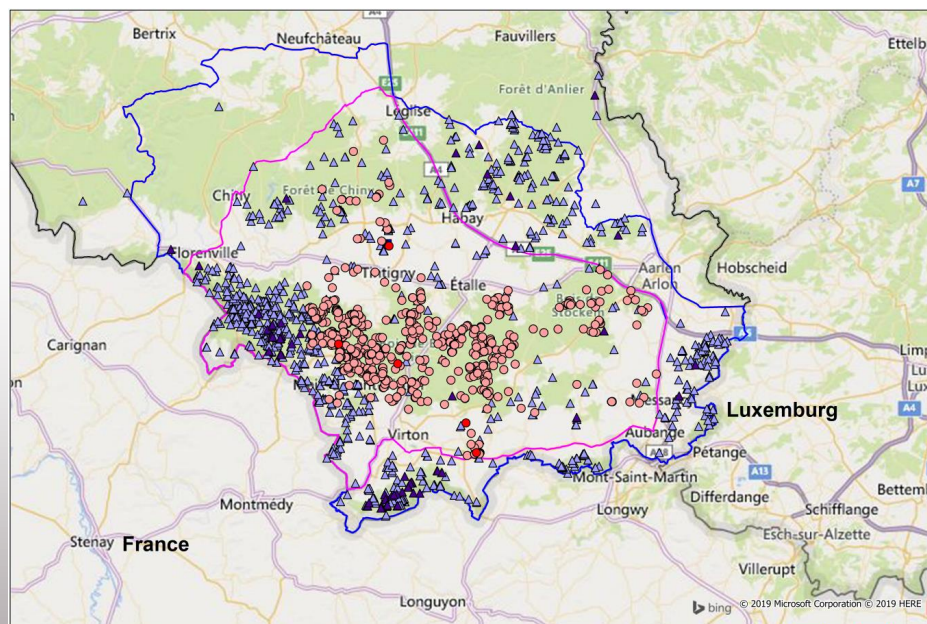


# 4. Current situation

- Different evolution in the different sub-zones
  - centre and east: transition in endemic situation
  - west: active circulation with virus at the level of the fencing installed in October

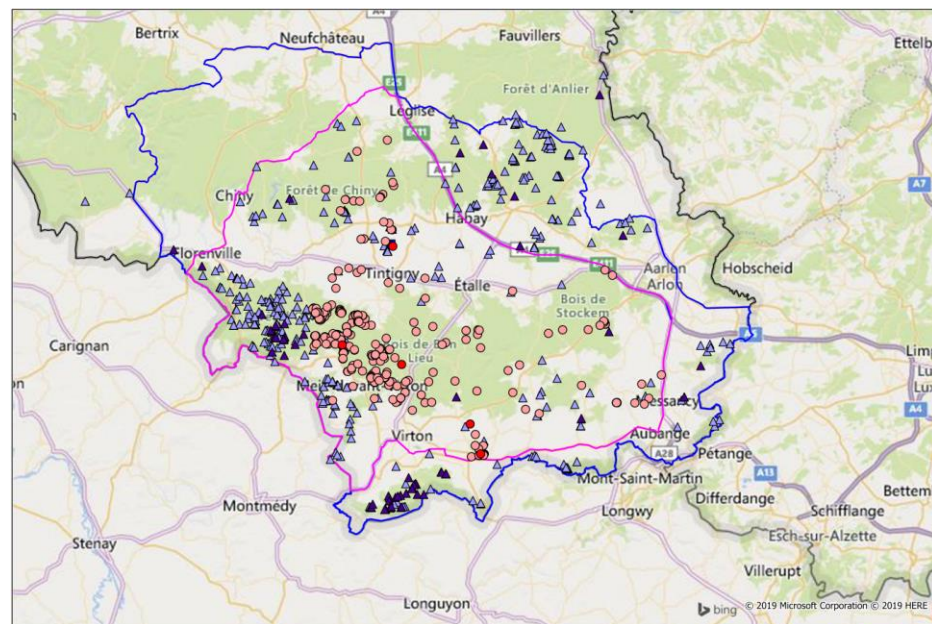
Total 13/09/2018 - 31/03/2019

Last 2 months – Febr. March 2019



31-03-2019

● positive (new) ● positive ▲ negative (new) ▲ negative ■ in progress ■ zone I ■ zone II



01-02-2019 - 31-03-2019

● positive (new) ● positive ▲ negative (new) ▲ negative ■ in progress ■ zone I ■ zone II

## 4. Current situation

- **Domestic pigs** (enhanced vigilance, cf. measures for domestic pigs): > 4000 analyses (+- 1000 holdings) , all negative/compliant

**No case among domestic pigs**

**Belgium remains free from ASF in domestic pigs and captive wild pigs, in line with article 15.1.3 of the OIE Terrestrial Animal Health Code**



# 4. Current situation

## STATUSES



Regionalization (Zoning) => measures and restrictions in the zones in question



1. ASF-free status for all swine: **Lost** (Recovery 1 year after last case)
2. ASF-free status for domestic pigs/swine: **Maintained**



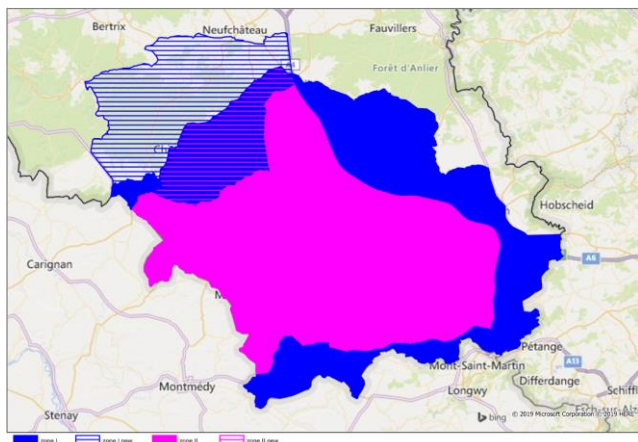


# 4. Current situation

## EU Zones

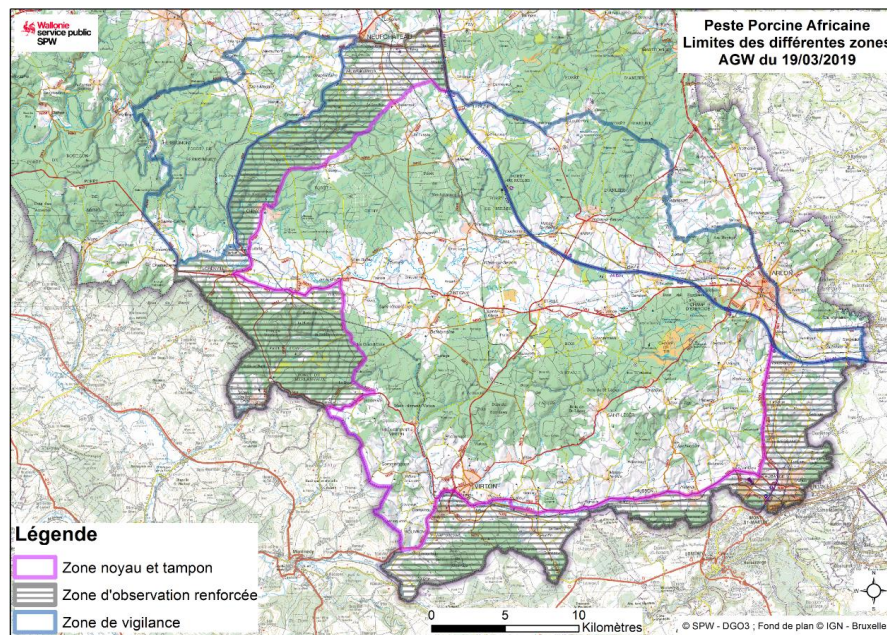


Management in domestic pigs



## National Operational Zones

Management in wild boars



- Kernel – Buffer Zone/核心-缓冲区
- Reinforced Observation Zone/加强观测区
- Vigilance Zone/警戒区

Last adaptation on 25th March 2019

# 5. Eradication strategy – Measures

*Strategic board (CVO, official veterinarians, scientists, boar specialists etc.)*

## **Objectives**

1. **Ultimate: Eradication of the disease    Short term :**
  - I. **Prevent introduction of African swine fever into Belgian pig farms**
  - II. **Prevent spread of the disease among wild boars**

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# 5. Eradication strategy – Measures

*In line with International guidelines and European legislation:*

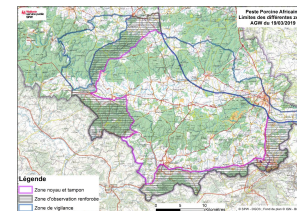
ASF management

- Chapters 4.3 (Zoning) and 15.1 (ASF) of the OIE terrestrial code
- Council Directive 2002/60/EC of 27 June 2002 laying down specific provisions for the control of African swine fever
- Implementing Decision 2014/709/EU concerning animal health control measures relating to African swine fever in certain Member States



# 5. Eradication strategy – Measures

## Zoning



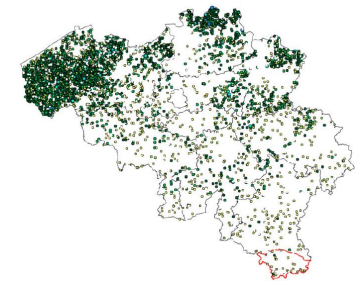
- Chapters 4.3 (Zoning) of the OIE terrestrial code
- Provisional infected zone delimited in line with article 15 of Council Directive 2002/60/EC: measures to limit the spread of the disease (September 2018)
- Delimiting 2 zones in line with Implementing Decision 2014/709/EU: measures to prevent the infection of domestic pigs and to assure safe trade of pigs and pig products (November 2018)
- Parallel zoning within the 2 zones in order to manage the disease in the wild boar population



# **Pigs: Preventive measures**

**NB: At all times: Mandatory registration of all pig farms**

- Number of pig farms in Belgium: +- 7,200
- Number of pigs in BE: 6.2 million (94% in Flanders)
- Number of pigs slaughtered per year: 11 million
- Turnover from exports: €1.3 billion (~ 90% intracommunity, 10% to third countries)
- Direct jobs: 15,000



In the initial infected zone (before general culling)

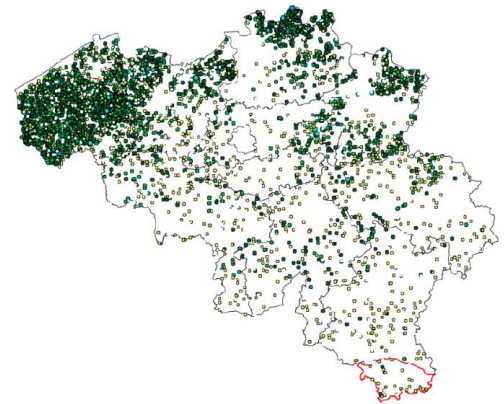
- +- 5,000 pigs
- The majority of these farms (+- 60) are individual owners raising pigs perfectly legally for their private use, and owning fewer than 10 pigs.





# **.be** Pigs: Preventive measures

**Avoiding infection of pigs – remaining free from ASF in domestic pigs and captive wild pigs, in line with article 15.1.3 of the OIE Terrestrial Animal Health Code**





## Pigs: Preventive measures in the “infected zone”

*< 27/09/2018 (date of elimination of pigs)*

- Inventory of number of pigs
  - within 72h, to be sent to FASFC
  - including the observations of the VT concerning biosecurity
- Check of all farms (Biosecurity, etc.) & info
- In particular, checking on separation of pigs – boars
  - if external trajectory - enclose or double fence (electric)
  - place all equipment, food, straw etc. out of reach of boars
  - special attention to the equipment used on the fields!



## Pigs: Preventive measures in the "infected zone"

*< 27/09/2018 (date of elimination of pigs)*

- Entry/exit of pigs
  - forbidden, except with FASFC authorization (=> slaughterhouse)
  - no EIC live pigs, sperm, embryos, ova
- Strengthen biosecurity
- Examine all illness/mortality



# Pigs: Preventive measures in the "infected zone"

**27/09 – 03/10/2018**

Eliminate the risk of introducing African swine fever to pig farms:

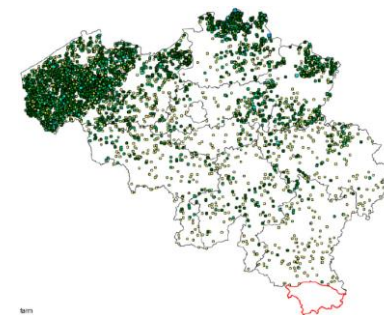
**Elimination of all domestic pigs in the infected zone:**

**Ban on repopulation**

**Compensation**

1. Federal: Sanitary fund (animals + food)
2. Walloon region: Immediate economic losses and compensation for loss of activity

**Supervision: Governor of the province**



## Pigs: Measures applied in the zones I and II

**Application of the EU rules (restrictions-prohibitions)**  
defined in Implementing Decision 2014/709/EU: measures  
to prevent the infection of domestic pigs and to assure safe  
trade of pigs and pig products





## Pigs: Preventive measures on the entire territory

### At all times

- Prohibition to access pigs holding for persons that have been in contact with wildlife in the prior 72 hours
- Prohibition to introduce wild boars or (part of) carcasses thereof in pig holdings
- Strict biosecurity measures (limited access, disinfection baths at the entry of the stables, dedicated clothing, etc.)
- No outdoor access allowed for pigs, except if an effective double fencing not allowing contact with wild boar is in place around the outdoor area
- Prohibition of movement during the 4 weeks following the introduction of pigs into a holding, except if the pigs are moved for immediate slaughter or when using a quarantine facility on the holding



# **Pigs: Preventive measures on the entire territory**

## **At all times**

- Prohibition of feeding kitchen waste to pigs
- Mandatory cleaning and disinfection of vehicles dedicated to the transport of pigs, after each transport
- Mandatory additional cleaning and disinfection of vehicles dedicated to the transport of pigs that are entering Belgium and originate from third countries or risk areas within the EU
- Mandatory notification to the FASFC of clinical signs in pigs suspected of having been caused by ASF.





# Pigs: Preventive measures on the entire territory

## Extra preventive measures since the outbreak

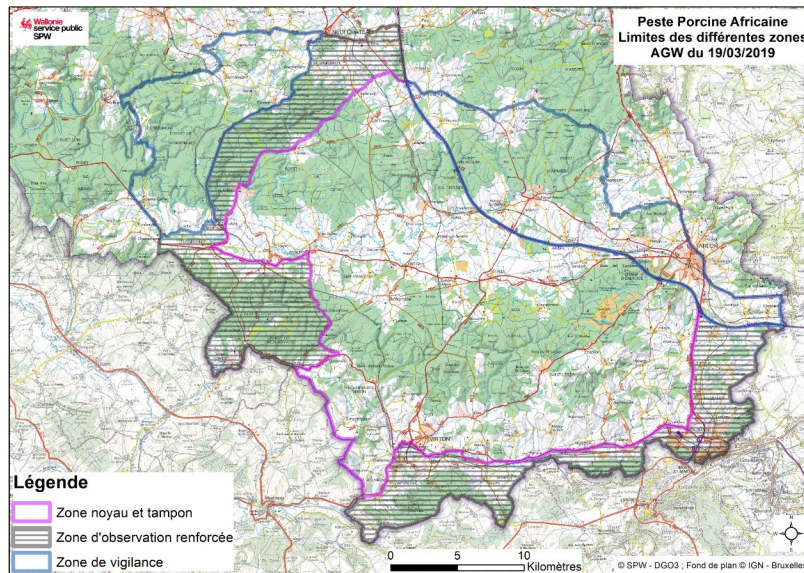
- Assembly of pigs prohibited
- Access to holdings limited to those persons that are really indispensable for the good management of the holding
- **Enhanced passive surveillance: in case of sickness of pigs, 3 pigs have to be sampled and analyzed regardless the clinical symptoms**



# Wild Boars: Measures in the “zones”

## Strategic objectives for eradicating the disease

- Knowledge of the situation & its evolution
- Limiting & preventing spread among wild boars
- Eliminating contaminated carcasses (= removing the source of infection)
- Progressive and adapted elimination of all wild boars



### Basis for the definition of zones

1. *Presence of the ASF virus*
2. *Boars' habitat & forested areas*
3. *Existent natural or artificial barriers*



# Wild Boars: Measures in the “zones”

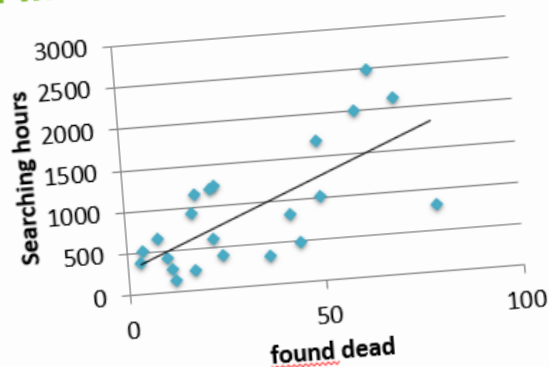
## ASF-WB Management organization



# Wild Boars: Measures in the “zones”

Many tools putted in place to support the strategy

Relation between searching intensity and found dead wild boar (weeks 1-22)

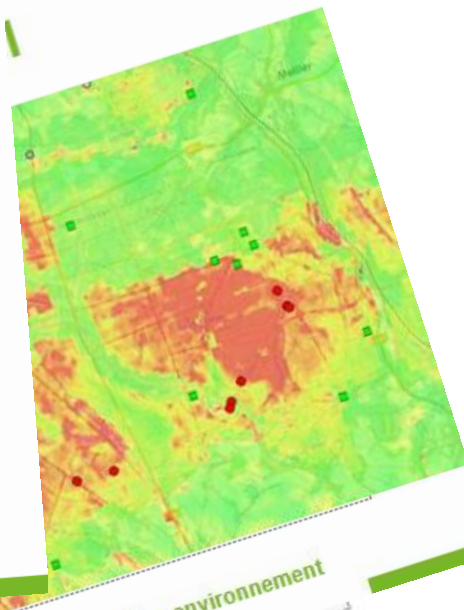


$$y = 19,272x + 305,84$$

$$R^2 = 0,4458$$

◆ Searching intensity (hours)  
— Linéaire (Searching intensity (hours))

Contribution of other variables : density and carcass model ?



Wallonie  
service public  
SPW

Service public de Wallonie agriculture ressources naturelles environnement

Wallonie  
service  
SPW

Wallonie  
service public  
SPW

Service public de Wallonie agriculture ressources naturelles environnement

# Wild Boars: Measures in the "infected zone"

## Phase I (13/09 – 15/10) – in the entire zone

- Searching for carcasses => monitoring => knowledge of the true situation (extent of the disease)
- Ban on feeding wild boars in order to limit contacts between groups of boars.
- Total ban on activities in forests (hikers, forestry works, hunting etc.) => not to disturb the boars (= limiting contamination among them and the geographical spread of the contamination via movement)

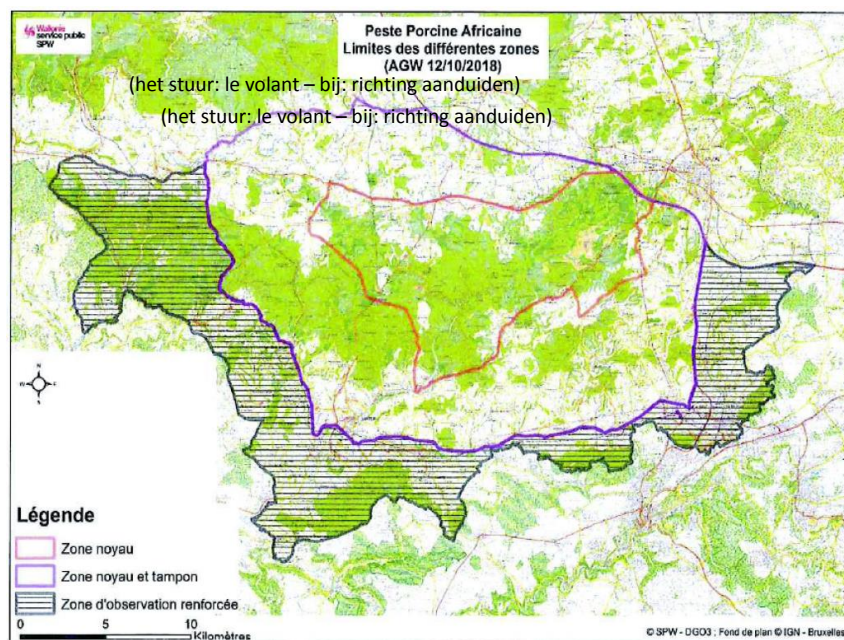







# Wild Boars: Measures in the "infected zone"

**Phase II:** 15 October 2019 – EU "infected zone" divided into 3 separate operational zones:

1/ Kernel – 2/ Buffer – 3/ Reinforced Observation Zone (ROZ)



-  Kernel Zone
-  Kernel – Buffer Zone
-  Reinforced Observation Zone

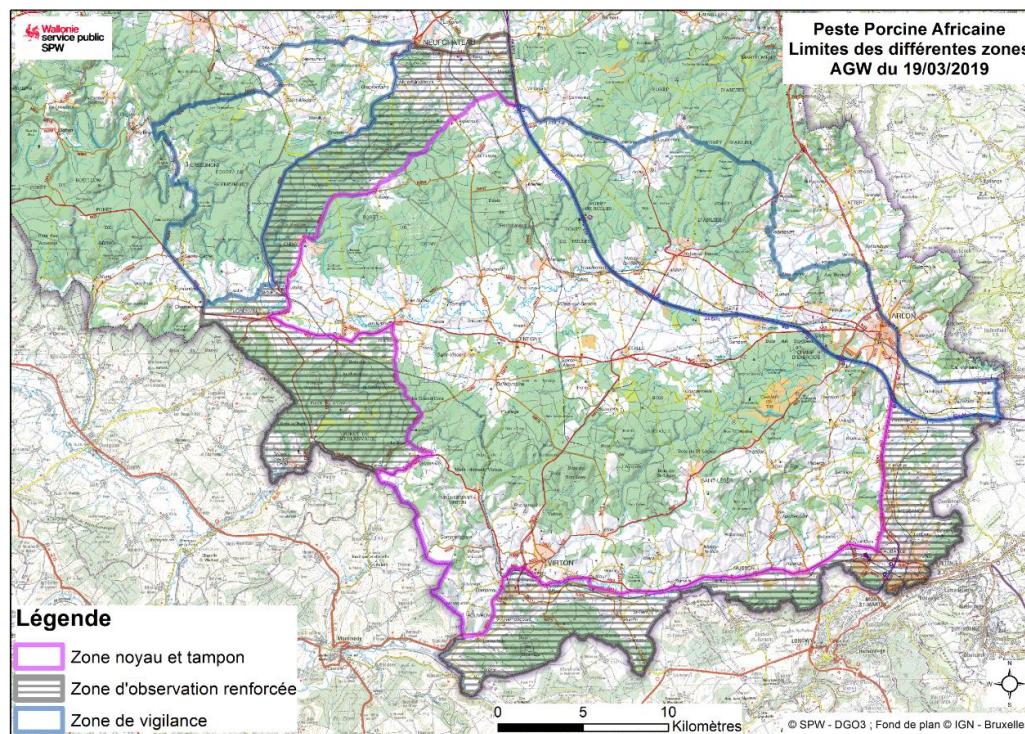


# Wild Boars: Measures in **zones I and II**

**Phase III:** 23 November 2019 – "zones I and II" divided into 4 distinct operational zones:

1/ Kernel – 2/ Buffer – 3/ Reinforced Observation Zone (ROZ) – 4/ Vigilance

Kernel – Buffer Zone  
Reinforced Observation Zone  
Vigilance Zone



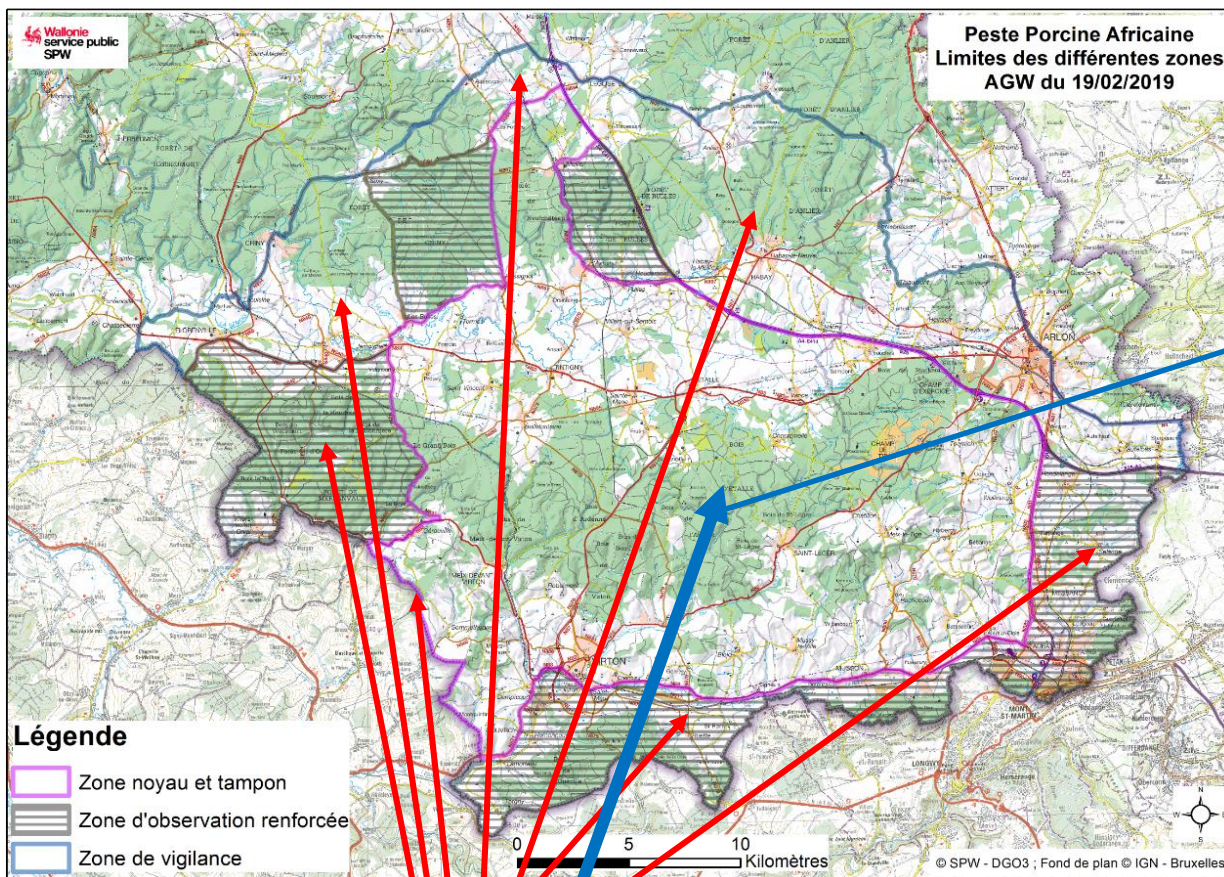
# Wild Boars: Measures in **zones I and II**

Updated on 15 March	Kernel and buffer zone	ROZ (reinforced observation zone)	vigilance
<b>Feeding</b>	Prohibited	Prohibited	Prohibited
<b>Traffic</b>	Prohibited (except services of general interest and derogations)	free /	free /
<b>Forest holdings</b>	Spruces infested with bark beetles have been marked since 15 January; since 1 February it has been possible to take out the spruces infested with bark beetles, upon request to the DNF and following a preliminary search for fresh carcasses	free	free
<b>Search</b>	Intensive	Intensive in addition to the hunting programme	Active
<b>Hunting</b>	Prohibited	All game except wild boars, which are destroyed	All game except wild boars, which are destroyed
<b>Destruction of wild boars</b>	All means (under the supervision of the authorities)	All means	All means





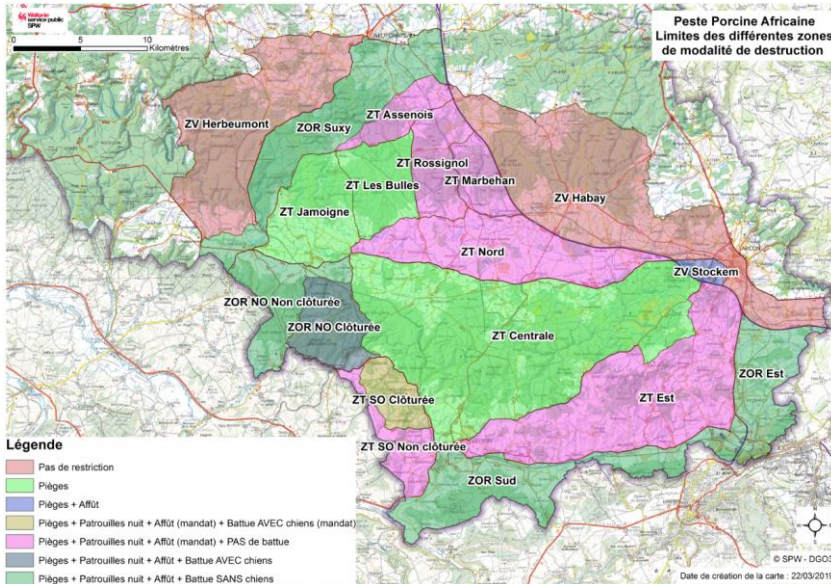
# Wild Boars: Measures in zones I and II



Long term

**Destruction objective: 0 wild boars = “depopulation zone”**

# Wild Boars: Measures in zones I and II



## Wild boar culling according to the zone

Zone	Biosecurity	Culling by	Dogs	Destruction methods	Subsidies for carcass management and transport
Forested Kernel-buffer	High	Authorities	no	traps	
Kernel-buffer	High	Authorities or hunter with mandate	no	Traps, Night shot, High seat + baiting	100 €
Fenced Kernel-buffer	High	Authorities or hunter with mandate	Small ones	Traps, Night shot, High seat + baiting, Driven hunts	100 €
Reinforced Observation	High	Hunters with support of Authorities	no	Traps, Night shot, High seat + baiting, Driven hunts	100 €
Fenced Reinforced Observation	High	Hunters with support of Authorities	Small ones	Traps, Night shot, High seat + baiting, Driven hunts	100 €
Vigilance	Medium	Hunters	yes	Every	50 €

Methods used to destruct wild boars in function of the sub-zone and the risk of spreading the disease : No restriction – Traps - Hunting on the lookout - Hunting in battue with or without dogs



7 x SAUER Panthera 100

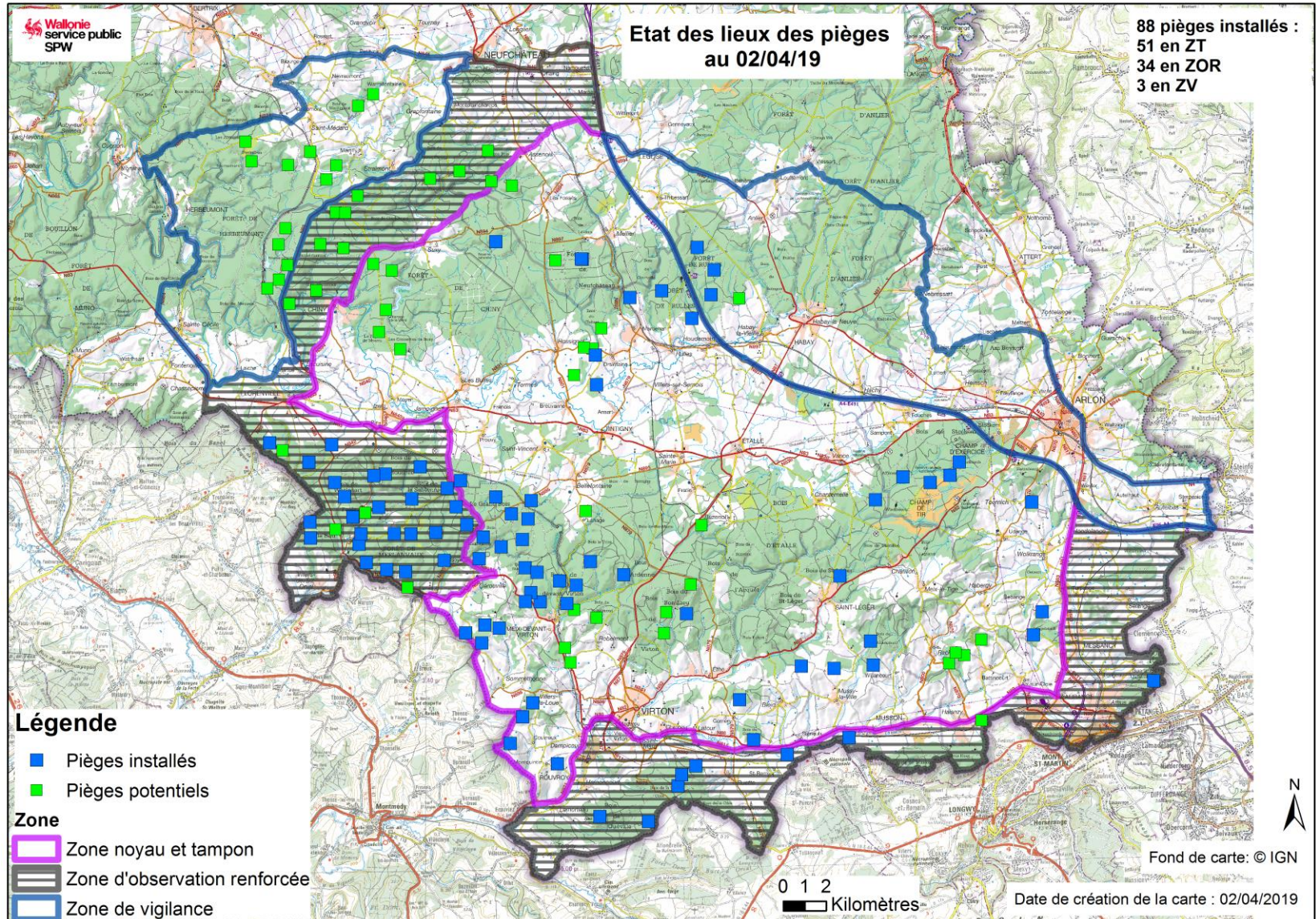


+ LAHOUX Dedal-490





# Traps





# Traps



Enclos de 0.3 à 1 ha



Piège INBO démontable 3x3



Piège coral





# Traps



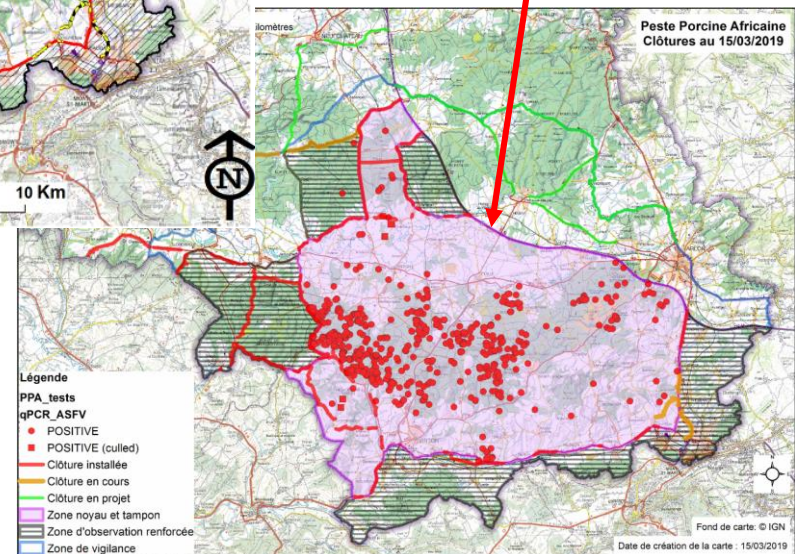
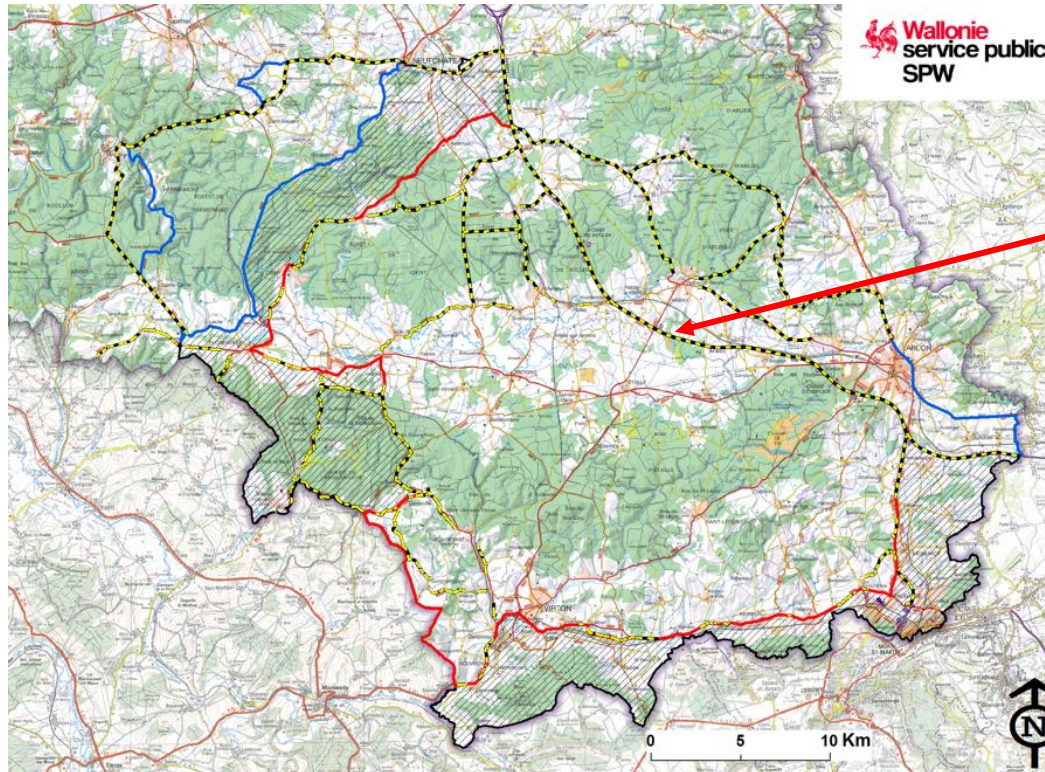


# Traps





# Fences





# Fences





# Fences





# Collection of the dead wild boars

A partnership established among the Public Service of Wallonia, the Federal Civil Protection and the faculty of Veterinary medicine at the University of Liège:

- Active search by the agents of Public Service Wallonia, the army and the hunters
- Collection of the dead wild boars by the Civil Protection  
-> collection centre
- ASF sampling by the approved veterinarians of University of Liège
- Samples are sent to NRL Sciensano
- All wild boars carcasses are sent to Rendac for destruction
- ....





# Collection of the dead wild boars





# Collection of the dead wild boars





# Collection of the dead wild boars



# Wild Boars: Measures **in the rest of Belgium**

Active surveillance + reduction of the wild boar population



Preparation in case of new outbreaks



# Conclusion measures



## ***Domestic pigs***

- Enhanced passive surveillance in pig holdings is maintained and awareness among different stakeholders (farmers, vets, .. )



- Biosecurity !
- (Preparation in case of an outbreak)



## ***Wild boars***

In order to contain & eradicate the disease

- Intensive search & **Removal of carcasses** (source of infection)
- **Intensive destruction** of the wild boar population is ongoing specifically in the western part of zone I
- **Different fence networks** put in place (also French one) as a tool to slow down the spread of the disease





# Cooperation with neighbouring countries



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère de l'Agriculture,  
de la Viticulture et de la  
Protection des consommateurs

Administration des services vétérinaires



Ministry of Agriculture, Nature and  
Food Quality of the Netherlands

- ✓ Consultation, cooperation and permanent information exchange
- ✓ Harmonized and consistent cross-border measures
- ✓ Ministerial level, CVOs, local level



Federal Agency for the Safety of the Food Chain



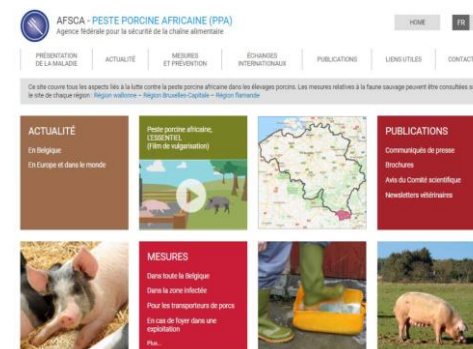
## 6. CONCLUSIONS

- No African swine fever among domestic pigs
- Effective use of Regionalization / Zoning (OIE & EU rules)
- African swine fever among wild boars is contained: Fences and depopulation zone
- Enhanced vigilance throughout the country
- Intense cooperation with neighbouring countries and the European Commission



# Information – Links to websites

- AFSCA/FASFC FR – ENG  
<http://www.afsca.be/ppa/>  
<http://www.afsca.be/businesssectors/animalproduction/animalhealth/africanswinefever/>
- Walloon Region  
<http://www.wallonie.be/fr/actualites/mesures-de-lutte-contre-la-peste-porcine-africaine>
- EU Commission & OIE  
[https://ec.europa.eu/food/animals/animal-diseases/control-measures/asf\\_en](https://ec.europa.eu/food/animals/animal-diseases/control-measures/asf_en)  
<http://www.oie.int/en/animal-health-in-the-world/animal-diseases/african-swine-fever/>
- EU Commission educational film  
<https://www.youtube.com/watch?v=eyQ4t1wHI2M&feature=youtu.be>
- Scientific Committee's opinions  
<http://www.favv-afsca.fgov.be/ppa/publications/avis/>





Federal Agency for the Safety of the Food Chain

*Thank you for your attention*



**Dr Jean-François HEYMANS, DVM**

 Director general ad interim – Director of Animal Health - DG Control Policy (FASFC)  
Chief Veterinary Officer (CVO) for Belgium - Belgian delegate to the OIE

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