



# Better Training for Safer Food Initiative

**Edvins Olsevskis**

**Managing wild boar population;**

**Latvian experience of ASF surveillance and epidemiological investigation in a wild boar infected area**

# BTSEF

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# Content

- Some aspects of wild boar biology / reproduction
- Factors affecting wild boar population size
- Effectiveness of targeted hunting
- Baiting vs supplementary feeding
- Effectiveness of feeding/ baiting controls
- LV experience – passive and active surveillance
- Epidemiological investigation – ASF cases in wild boar (LV)

# Something about wild boar biology

- Female maturity ~ at 15 months of age
- In Nord Europe - usually one litter per year (5-7 piglets)
- Piglets born in April-May

# Impact of the supplementary feeding and global warming to the population

- Female maturity ~ even at 8-10 months of age
- Two litters per year!
- Piglets born in April-May and August-September

AND.....

Wild boar population is growing very fast!!!

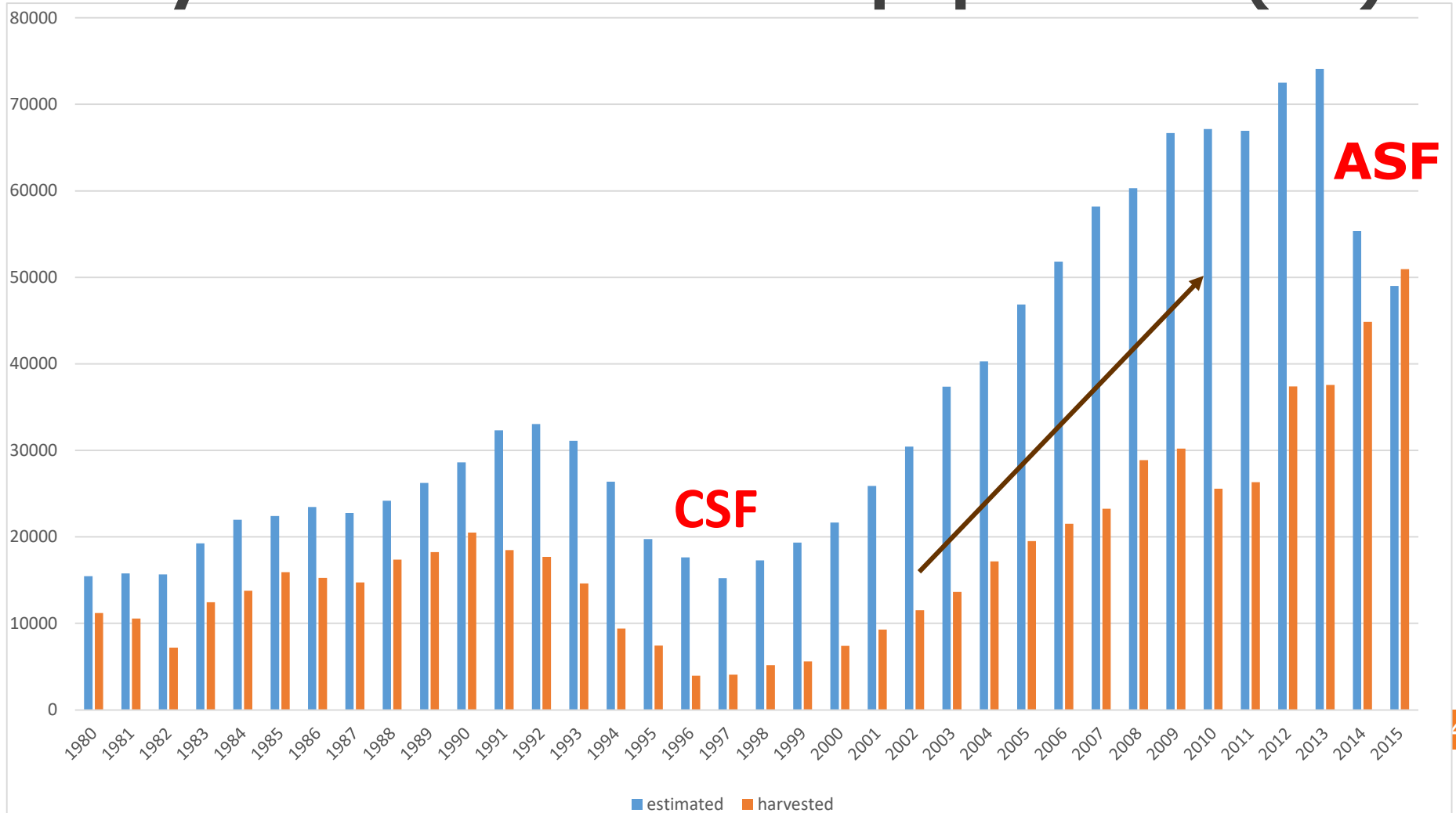
...even in Baltic region!!!





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# Dynamics of wild boar population (LV)



# Factors affecting population size

- **Natural mortality** – up to 20-30% (mostly piglets)
- **ASF, CSF or other epidemics...**
- **Hunting:**
  - Driven hunting (most efficient way to hunt wild boar)
  - Targeted (selective: sub-adult and adult female) hunting (most efficient way to reduce the population)
- **Supplementary feeding** – helps to sustain and increase the population

# What is stated by ASF strategy?

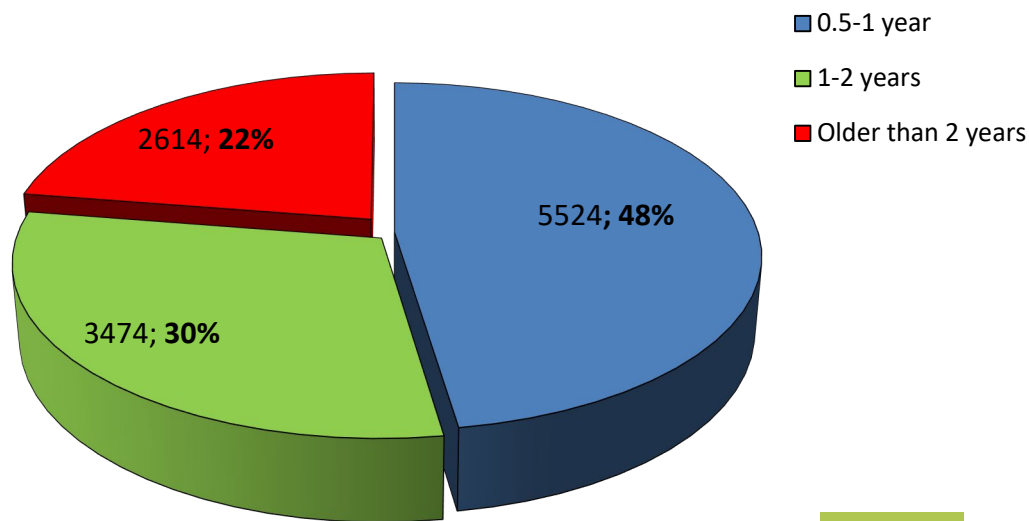
**ASF Strategy for Eastern Part of the EU** SANTE/7113/2015-Rev 7  
[https://ec.europa.eu/food/sites/food/files/animals/docs/ad\\_control-measures\\_asf\\_wrk-doc-sante-2015-7113.pdf](https://ec.europa.eu/food/sites/food/files/animals/docs/ad_control-measures_asf_wrk-doc-sante-2015-7113.pdf)

- Sustained feeding of wild boar is prohibited.
- Targeted hunting is encouraged in order to target adult and sub-adult females.
- The overall hunting bag should be balanced between male and females (50% each). Priority in reaching quotas should be given to adult and sub-adult females.

# Effectiveness of targeted hunting (some results) LV

**Targeted female hunting** – 11 642 female wild boar hunted during the period of November 2015-March 2016

Compensation to hunters for each adult and sub-adult female wild boar hunted was 100 EUR



Program reactivated in  
September, 2016.

**4111 female wild boar  
hunted during 4 months**

Compensation to hunters  
for each adult and sub-  
adult female wild boar –  
50 EUR



# Effectiveness of targeted hunting (preliminary conclusions) LV

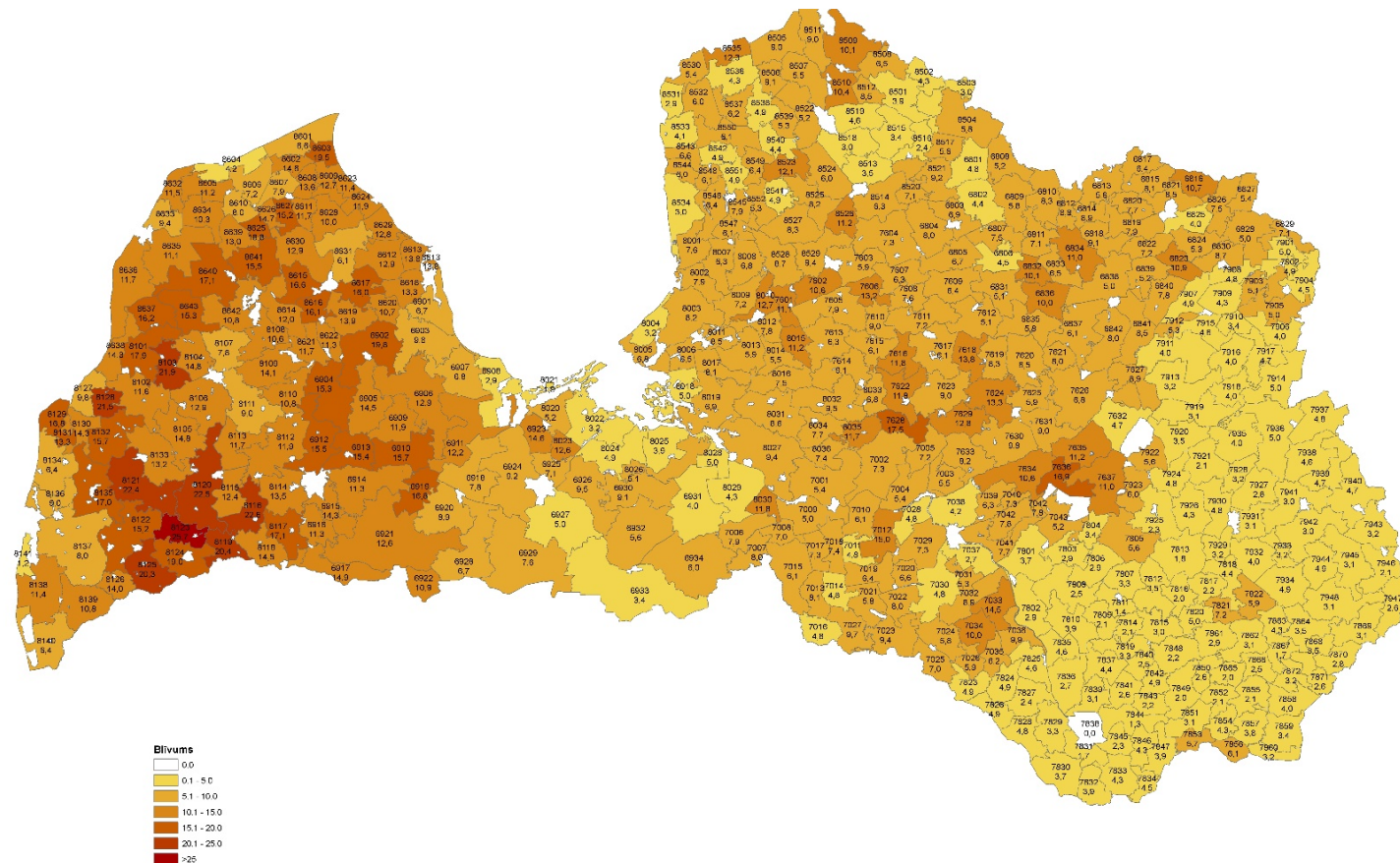
## Targeted female hunting:

- ✓ Hunters have to accept this measure!!!
- ✓ does not work without motivation;
- ✓ is very expensive measure;
- ✓ Cannot reach the effectiveness in a short term (one hunting season)
- ✓ Could be effective/cost effective in mid/long term (3-5 hunting seasons)
- ✓ Better to be done as a preventive measure!!!



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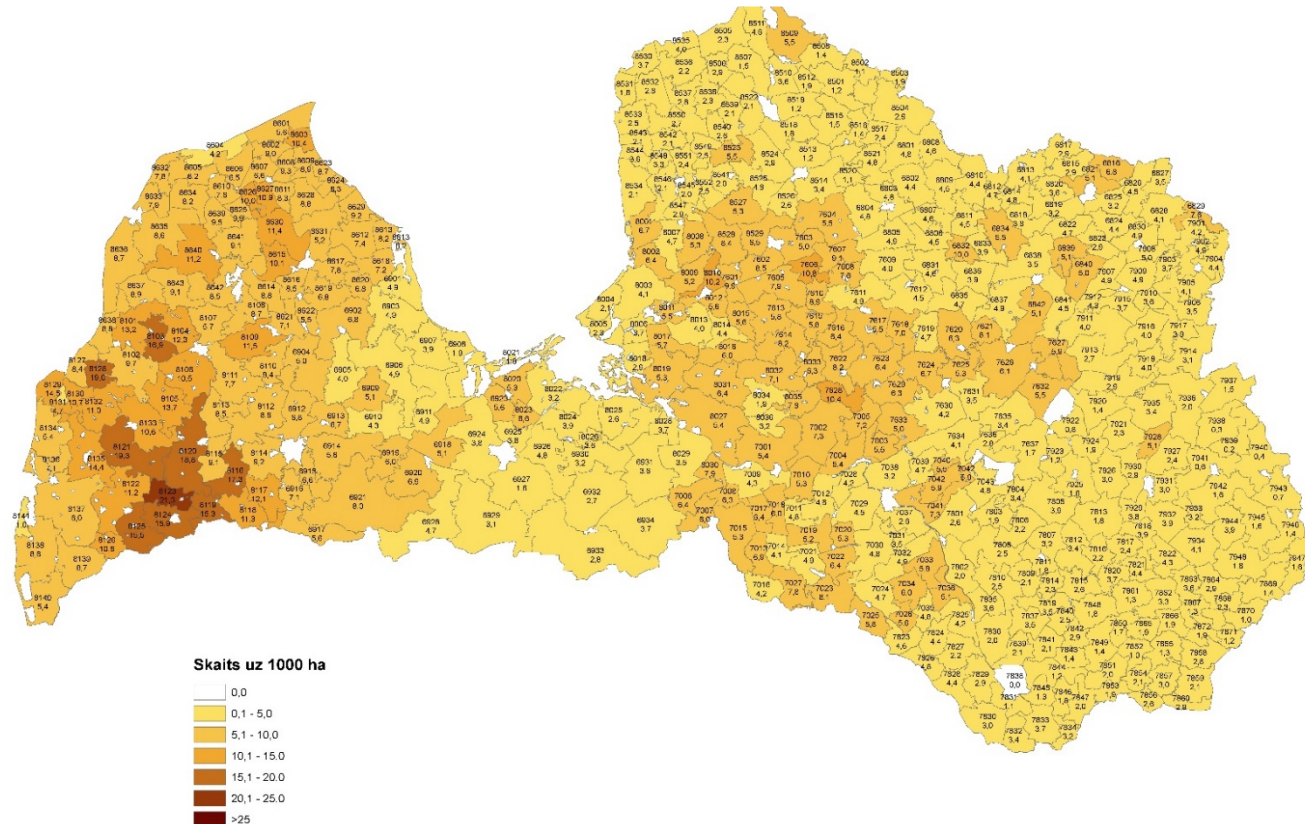
# Wild boar density 2014/2015 (LV)





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# Wild boar density 2015/2016 (LV)



# Baiting or supplementary feeding?



# Supplementary feeding: why not?

- «Free ranging farm in the forest»
- concentration of the large number of animals
- Could be the source of infectious agents and parasites
- Unnecessary increase of the susceptible population - hunters cannot hunt / manage so many animals...

# Baiting vs supplementary feeding

## ASF Strategy for Eastern Part of the EU

SANTE/7113/2015-Rev 7

[https://ec.europa.eu/food/sites/food/files/animals/docs/ad\\_control-measures\\_asf\\_wrk-doc-sante-2015-7113.pdf](https://ec.europa.eu/food/sites/food/files/animals/docs/ad_control-measures_asf_wrk-doc-sante-2015-7113.pdf)

**Baiting:** (non-sustaining feeding of wild boar): Attracting of wild boar with limited food (e.g. maize) only for the purpose of hunting. The maximum amount of food should not exceed 10kg/km<sup>2</sup>/month. Baiting should not, in any case, represent a source of feeding wild boar for sustaining the population during winter.

# How do we understand the baiting?



Photo: Ivars Koloda (LV)

# Effectiveness of baiting controls

- The purpose of controls: to check whether the baiting is really baiting (amount of the feed used)!
- These are not veterinary controls but they are very important
- Clear competence and responsibilities (Competent authority defined)
- National legislation is essential
- Sanctions (penalty, restrictions on hunting, reduction of licenses given etc.) need to be foreseen



# Effectiveness of the baiting controls

How to organize these controls:

1. Planned controls (complex controls including other areas as hygiene, hunting etc.) – predefined frequency
2. Repeated controls (to check whether problem is solved)
3. Extraordinary controls – based on complaints, etc.

# Feeding places for other species

**Feeding places/devises for other species:** (e.g. wild ruminants): Such feeding places for wild ruminants should not be accessible for wild boar. If possible only food should be used which is not attractive for wild boar (e.g. hay).



# Implementation of passive surveillance in Latvia

- Before ASF – very few wild boar were notified and tested

Then...

- Since 2013 massive training program for hunters
- in 2014 massive public awareness campaigns
- Fee for the notification of dead wild boar found (summer 2014)
- Fee for finding and disposal of WB carcass (2015)
- Involvement of local municipalities (2016)





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# Increase the awareness in hunters

## Meža cūku veselības uzraudzība

Lai uzraudzītu meža cūku populācijas veselības stāvokli un nepieciešamības gadījumā nekavējoties leviestu slimības apkarošanas pasākumus, PVD ik gadus no medniekiem pieņem paraugus laboratoriskai izmeklēšanai. Tas ir vienkāršs veids kā apstiprināt cūku mēra diagnozi un diferencēt to no citām saslimšanām.

Laboratoriskajai izmeklēšanai nepieciešams:

- asins paraugs (50–100 ml nesarecējušu asiņu),
- orgānu paraugs – mandeļes, liesa, nieres un apzarna limfmezgli (iesaiņoti atsevišķi).

Paraugi jāiesaiņo vienreizlietojamās, ūdensnecaurlaidīgās un marķētos trauciņos vai maisiņos.

Paraugi jāuzglabā un jāpārveidā +4°C. Paraugus nedrīkst sasaldēt!

Informāciju par paraugu pieņemšanas kārtību un iesaiņojamo materiālu var saņemt PVD teritoriālās struktūrvienības. Par katru laboratoriskajai testēšanai derīgu (kvalitatīvu) iesniegto paraugu PVD medniekam nodrošina samaksu.



## Jāziņo obligāti!

Ja nometītajai mežacūkai konstatē saslimšanas pazīmes vai medību laikā atrasta nobeigusies meža cūka, obligāti jāziņo veterinārārstam, PVD vai Valsts mežu dienestam (VMD), lai kopīgiem spēkiem operatīvi noskaidrotu iespējamās dzīvnieka nāves cēlonis, ņemot paraugus laboratoriskajai izmeklēšanai un veiktas vakcināciju, dezinfekciju, kā arī dzīvnieka līķa iznīcināšanu.

Izmaksas, kas saistītas ar rīcību cūku mēra aizdomu gadījumos, tiek segtas no valsts budžeta.

Būsim modri!

## Надзор за здоровьем диких свиней

Ежегодно, с целью контролировать состояние здоровья популяции диких свиней и при необходимости незамедлительно начать мероприятия по борьбе с заболеванием, ПВС принимает у охотников образцы для лабораторного исследования. Это единственный способ, при помощи которого можно диагностировать чуму свиней и дифференцировать ее от других заболеваний.

Для лабораторного исследования необходимо:

- образец крови (50–100 мл несвернувшейся крови);
- образец органов – миндалины, селезенка, почки, брыжеечные лимфоузлы (упакованные отдельно).

Образцы необходимо упаковать в одноразовую, водонепроницаемую и промаркированную посуду или пакетики.

Образцы необходимо хранить и перевозить при температуре +4 °C. Образцы нельзя замораживать!

Информацию о порядке приема образцов и упаковочном материале можно получить в территориальных управлениях ПВС.

За каждый представленный образец, пригодный для лабораторного тестирования (качественный), ПВС обеспечивает охотнику соответствующую плату.



## Сообщить обязательно!

Если у дикой свиньи, добытой на охоте, наблюдаются признаки заболевания или во время охоты найдена мертвая дикая свинья, вам следует обязательно сообщить об этом ветеринару, в ПВС или в Государственную лесную службу (ГСЛ), чтобы общими усилиями оперативно выявить возможные причины смерти животного, взять образцы для лабораторного исследования, провести уборку и дезинфекцию места, а также уничтожить труп животного. Расходы, связанные с действиями в случае подозрения на чуму свиней, покрываются из средств государственного бюджета.

Будем бдительны!



## Pārītkas un veterinārā dienesta pārvaldes

<b>Rīgas pilsētas pārvalde</b> Lubānas iela 49, Rīga, LV-1073	Tālrunis: <b>67039707</b>
<b>Rietumpierīgas pārvalde</b> "Krīvi", Tumes pagasts, Tukuma rajons, LV-3139	Tālrunis: <b>631-25850</b>
<b>Ziemeļpierīgas pārvalde</b> Kraujas iela 21/23, Rīga, LV-1024	Tālrunis: <b>67994265</b>
<b>Austrumvidzemes pārvalde</b> Lauku iela 5, Gulbene, LV-4401	Tālrunis: <b>644-74425</b>
<b>Ziemeļvidzemes pārvalde</b> Raiņa iela 21, Valmiera, LV-4201	Tālrunis: <b>642-07313</b>
<b>Dienvidlatgales pārvalde</b> Varšavas iela 24, Daugavpils, LV-5404	Tālrunis: <b>654-34599</b>
<b>Ziemeļlatgales pārvalde</b> Liepu iela 33, Rēzekne, LV-4600	Tālrunis: <b>646-22160</b>
<b>Dienvidzemes pārvalde</b> Helmaņa iela 10, Jelgava, LV-3004	Tālrunis: <b>630-07694</b>
<b>Austrumzemes pārvalde</b> Brīvības iela 88, Jēkabpils, LV-5201	Tālrunis: <b>652-34036</b> <b>652-20726</b>
<b>Dienvidkurzemes pārvalde</b> E. Veidenbauma iela 11, Liepāja, LV-3401	Tālrunis: <b>634-01902</b>
<b>Ziemeļkurzemes pārvalde</b> Daugu iela 2, Talsi, LV-3201	Tālrunis: <b>632-91660</b>

[www.pvd.gov.lv](http://www.pvd.gov.lv)

## Medniekiem ДЛЯ ОХОТНИКОВ



**Kas jāzina  
par Āfrikas cūku mēri  
un klasisko cūku mēri?**

**Что необходимо знать  
об Африканской чуме свиней и  
классической чуме свиней?**

# Passive surveillance in practice...





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# Passive surveillance in practice...





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# Passive surveillance in practice...

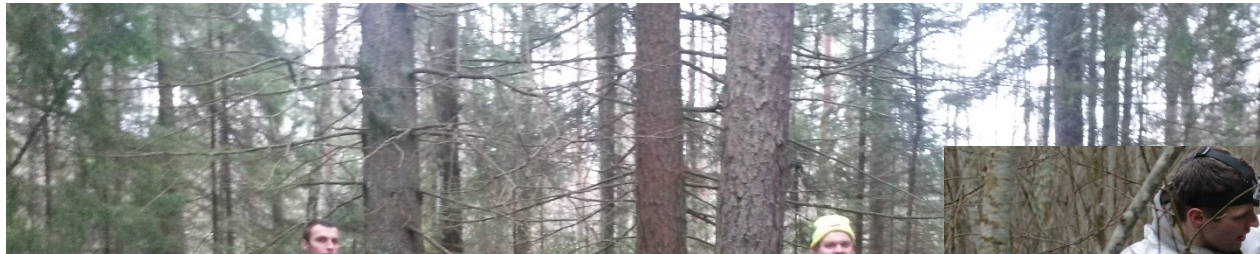






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# Collection of carcasses



# Collection and disposal of carcasses



HURIKAN Pro1000

## Containers

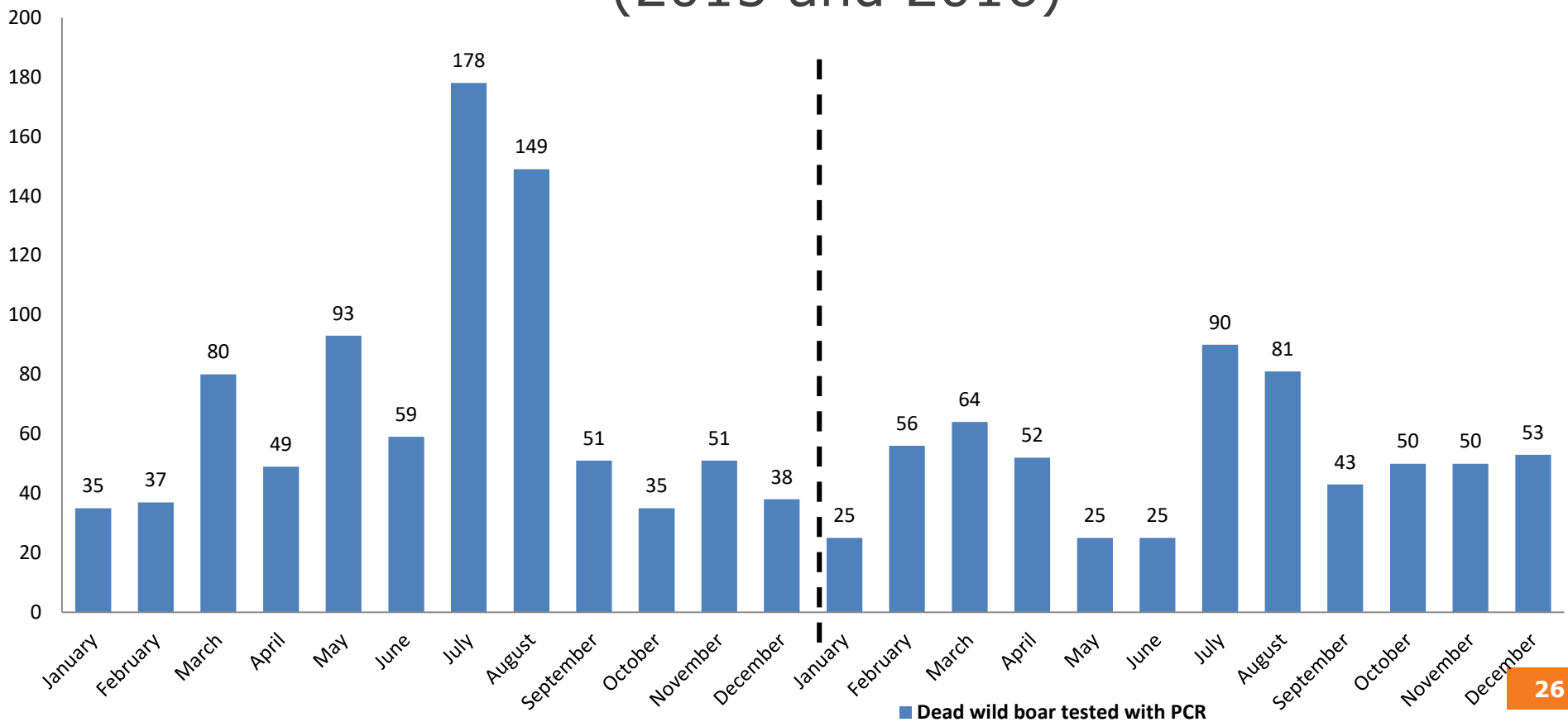


Photo: M.Ulmanis (LV)



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# Results of passive surveillance (2015 and 2016)

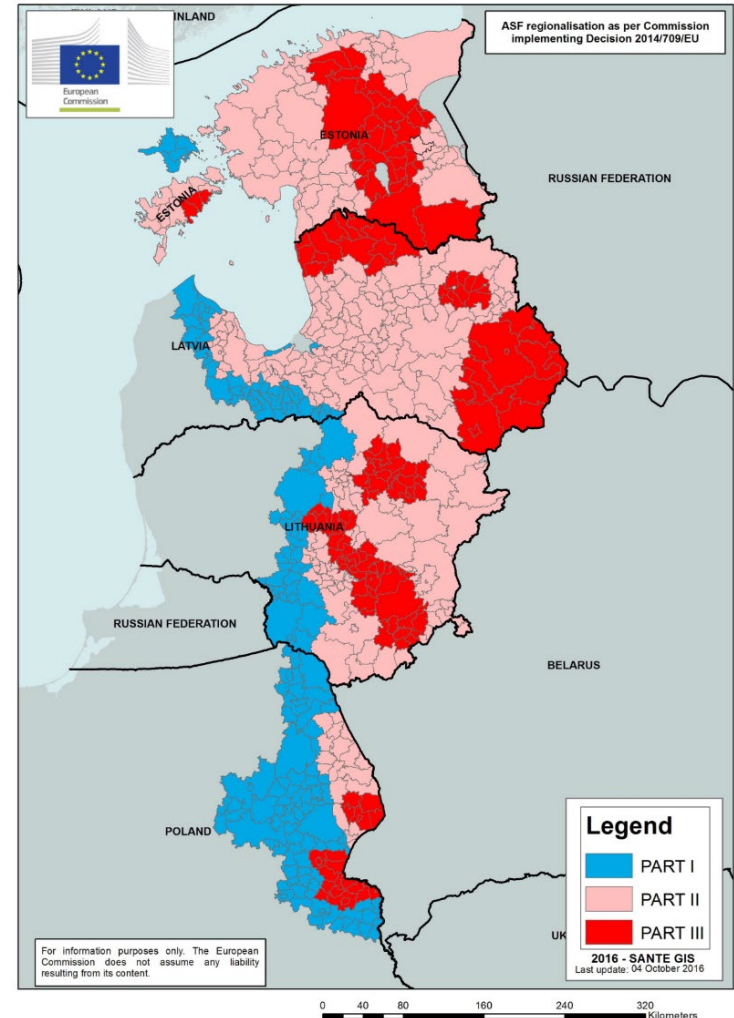
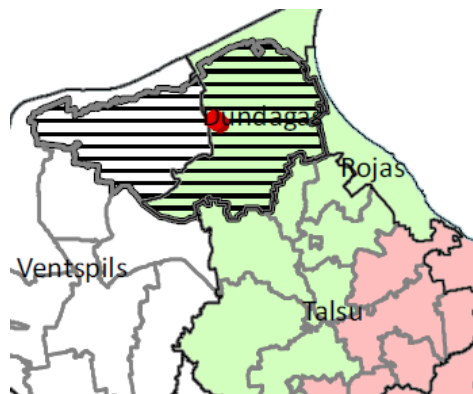




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# Active surveillance

- Initially – potential infected area 200km<sup>2</sup>
- Then Part II is established



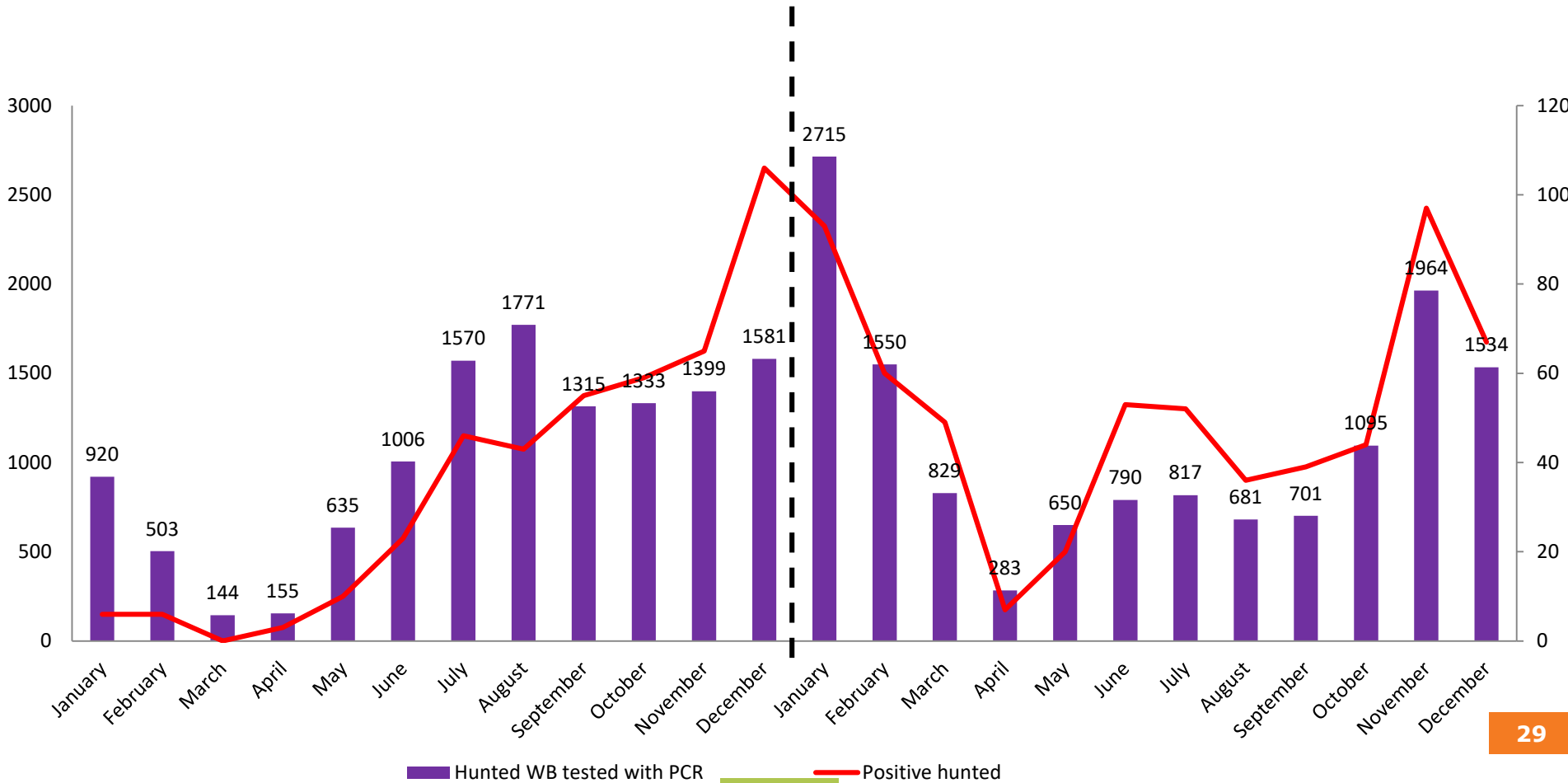
# Active surveillance – where to start from?

- Meetings with local forest rangers (Forest service)
- Meetings with all local hunting clubs;
- Training and instructions to hunters on:
  - ✓ Hunting restrictions (if any)
  - ✓ sampling
  - ✓ storage of carcasses
  - ✓ meat / carcass movement restrictions
  - ✓ collection and disposal of carcasses
  - ✓ etc...



# ASF virus detection

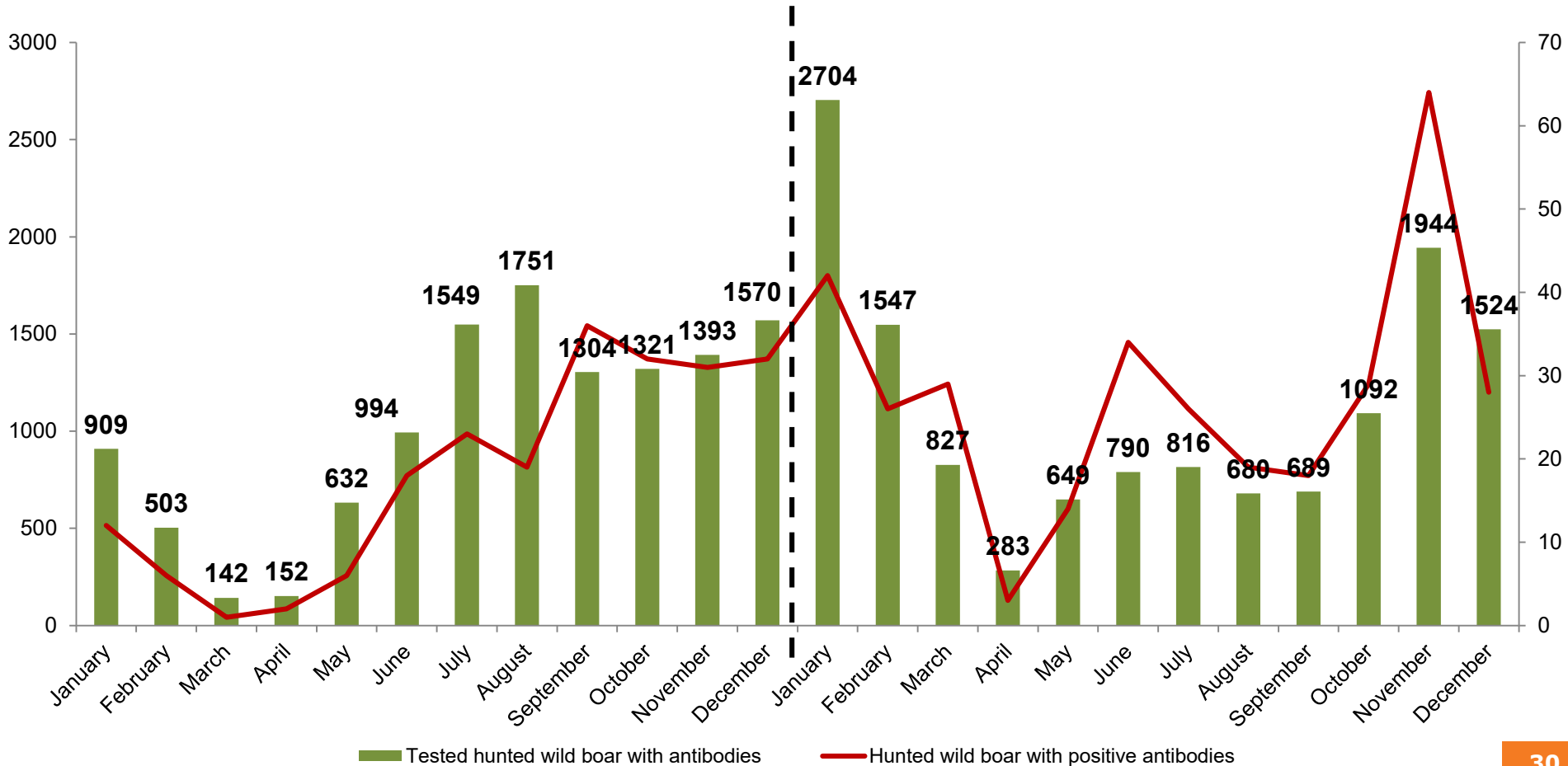
## Results of active surveillance (2015-2016)





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# Results of active surveillance (2015-2016) (2)



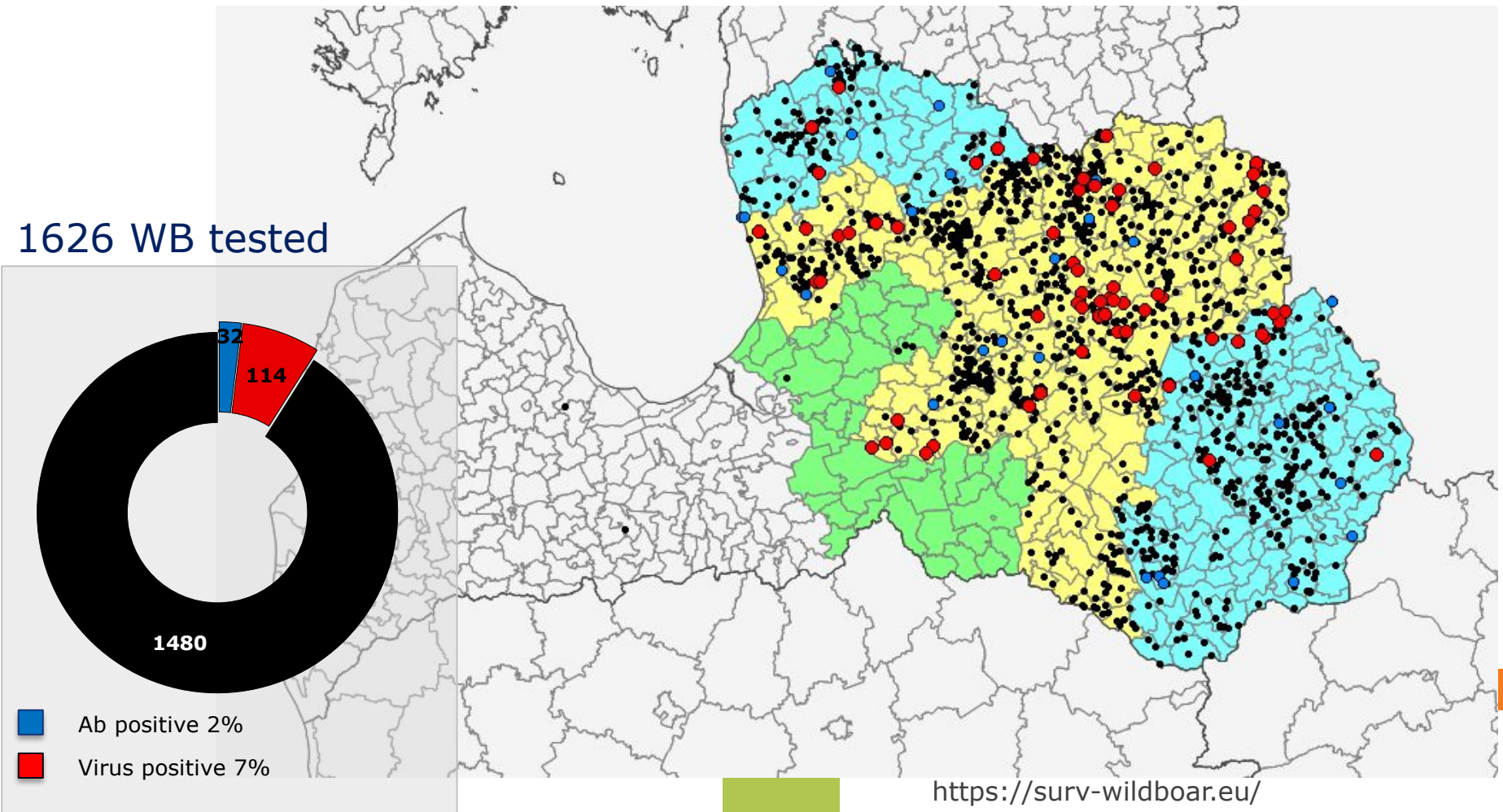
# Controls to verify an effectiveness of active surveillance

Collaboration with State forest service:

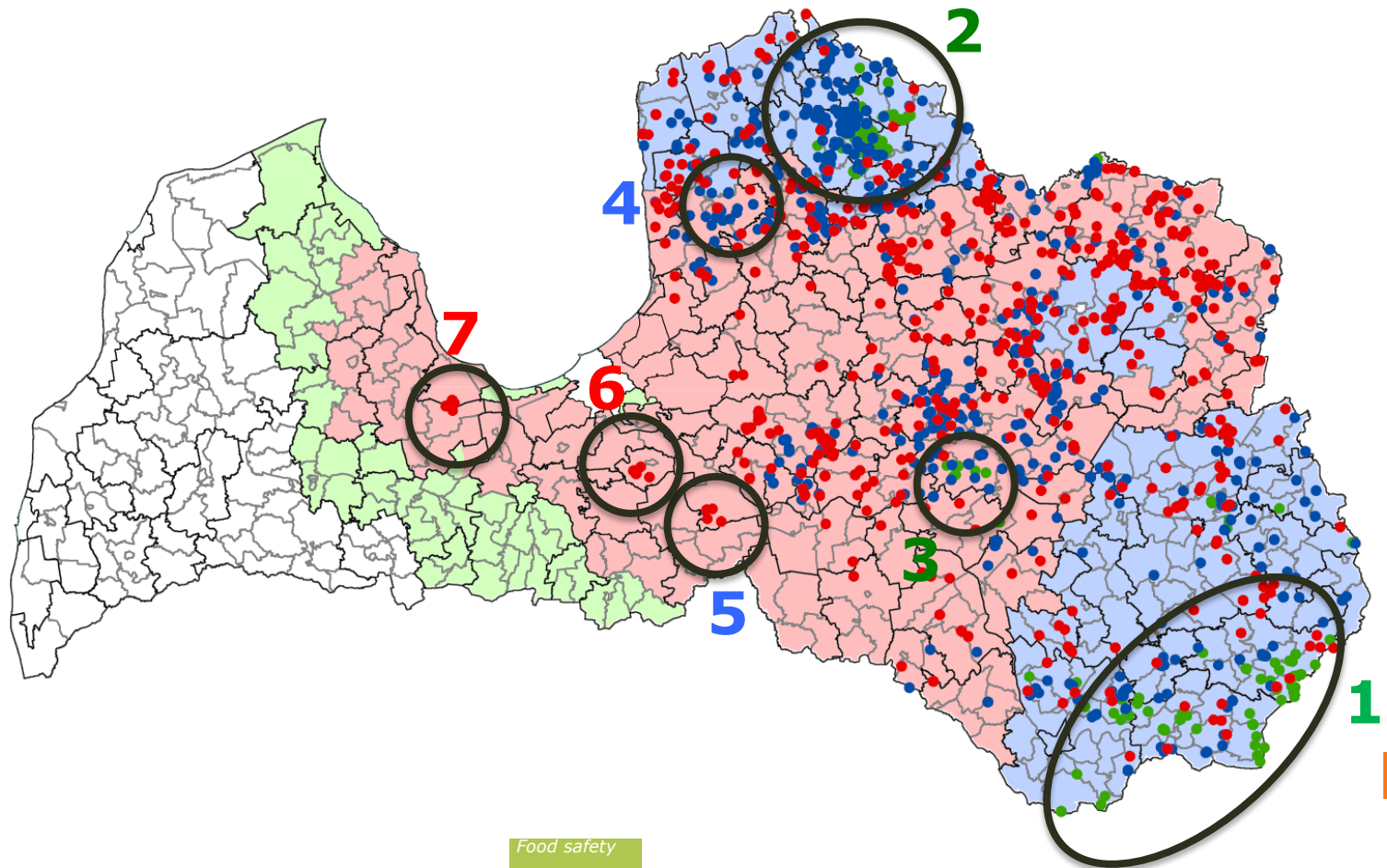
- Monthly reports collected from hunters
- Signature of the official vet for every wild boar hunted (and sampled)
- Sanctions in place (administrative + hunting restrictions)



# Just an example (December 2015)



# ASF virus spread in wild boar (2014 - 2016)



# Epidemiological investigation in ASF infected areas

Where to start from:

1. Interview with the head of local hunting club
  2. Conversation with local forest ranger
  3. Conversation with local hunters on possible sources of the infection
  4. Conversation with hunters from neighboring hunting clubs
  5. Conversations with local people
- 



In 99% cases the result will be based  
on rumors

## Conclusions

1. Hunters are main target audience to ensure good passive and active ASF surveillance.
2. Motivation tools are necessary for hunters.
3. Collaboration between veterinary and environment (forestry) authorities is essential for good control on ASF surveillance.
4. People are still the main factor for ASF virus spread!



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## **Better Training for Safer Food BTSF**

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