



REPUBLIC OF ESTONIA  
VETERINARY AND FOOD BOARD

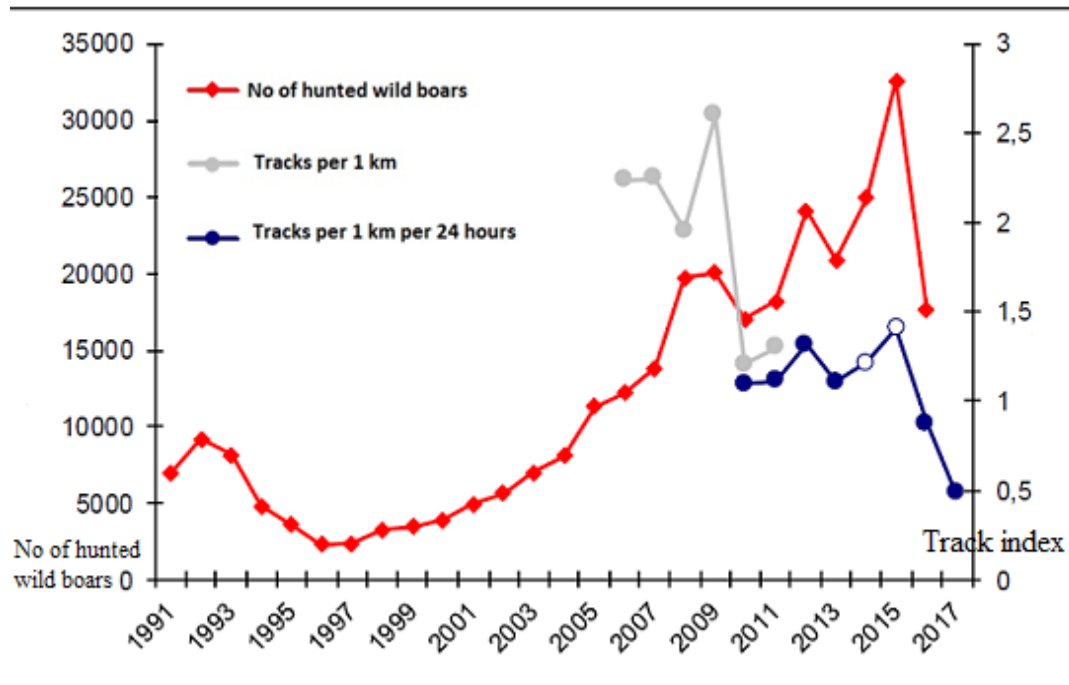
# ASF situation in Estonia



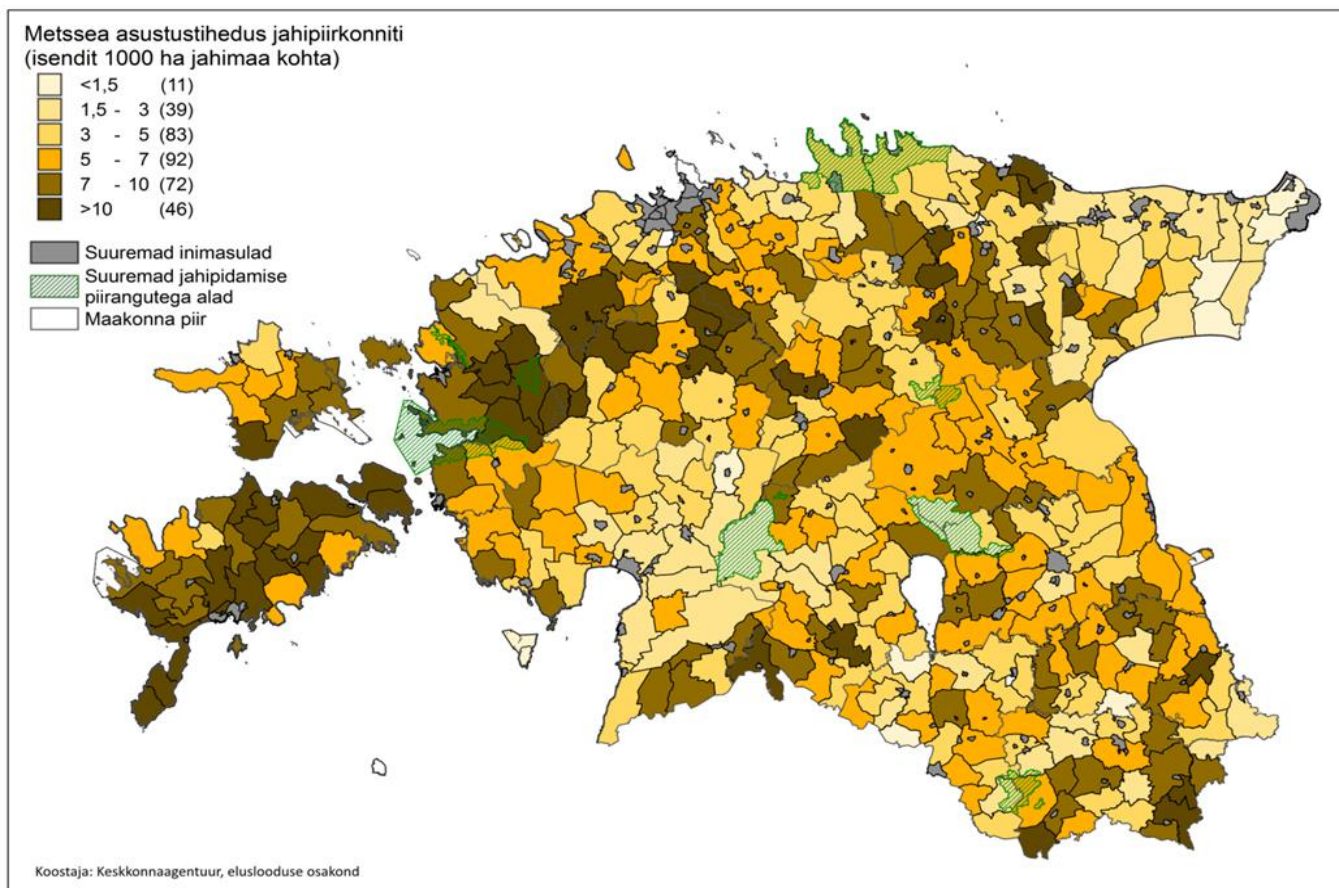
Chishinau, Moldova  
20.09.2017

# Wild boar population data (1)

- The number of wild boar hunted in 1991 – 2017 and winter track index

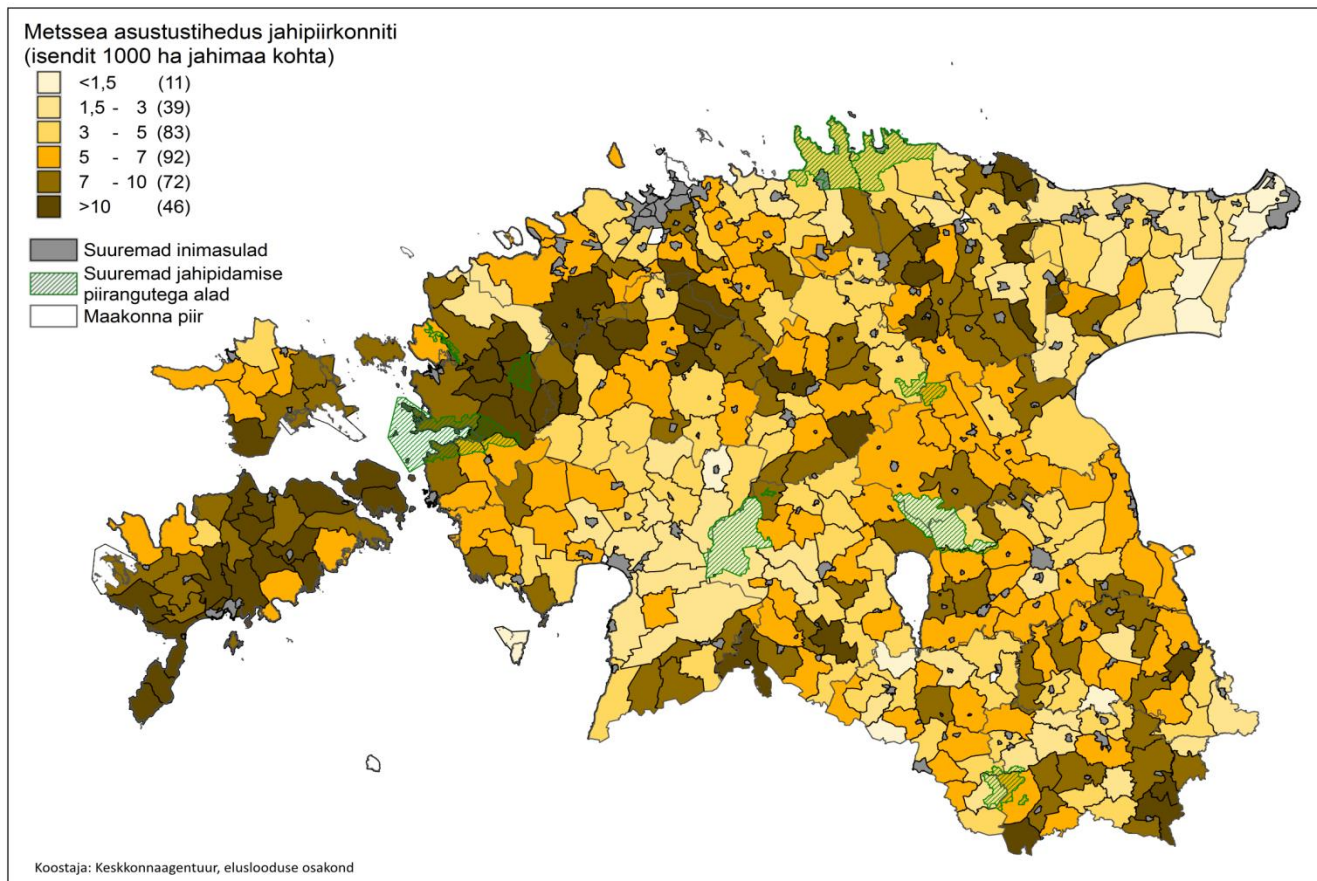


# Wild boar population density per 1000 ha hunting ground 2014





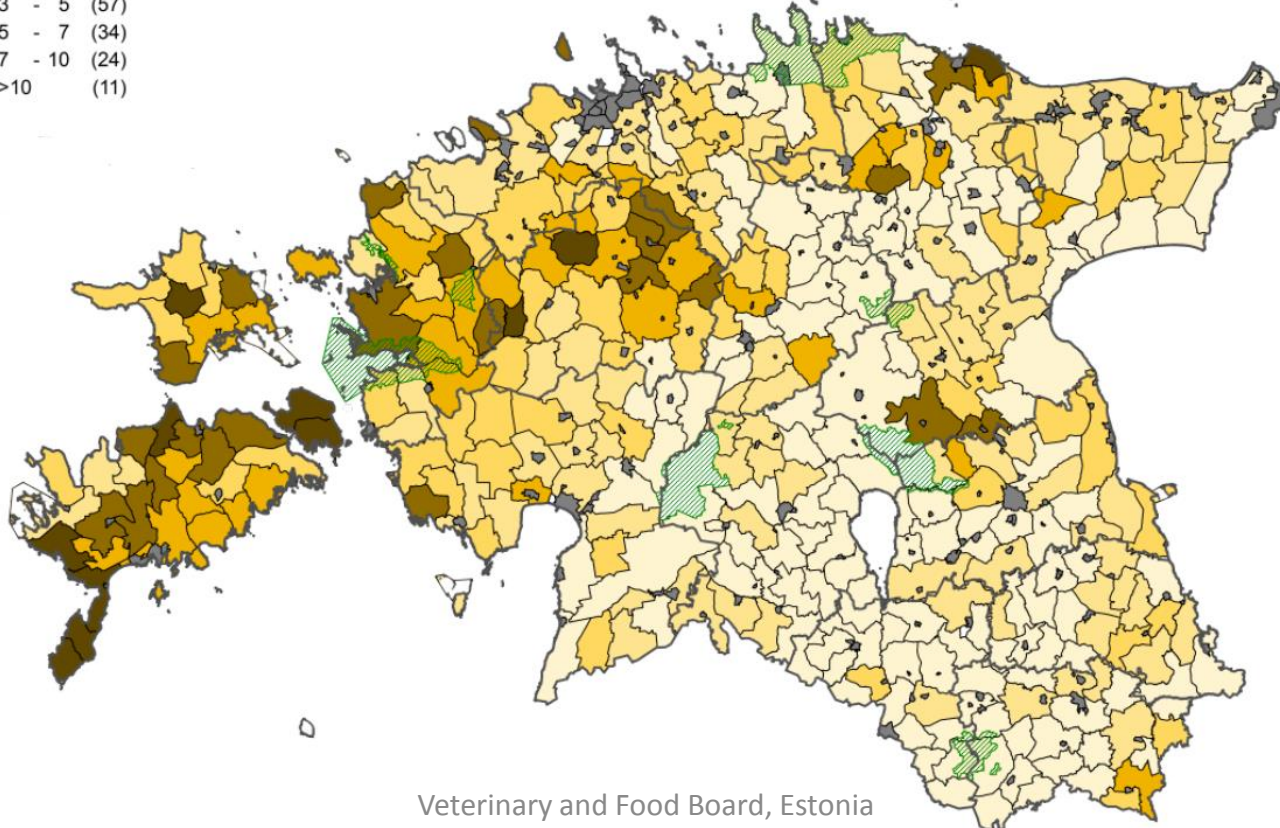
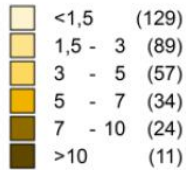
# Wild boar population density per 1000 ha hunting ground 2015





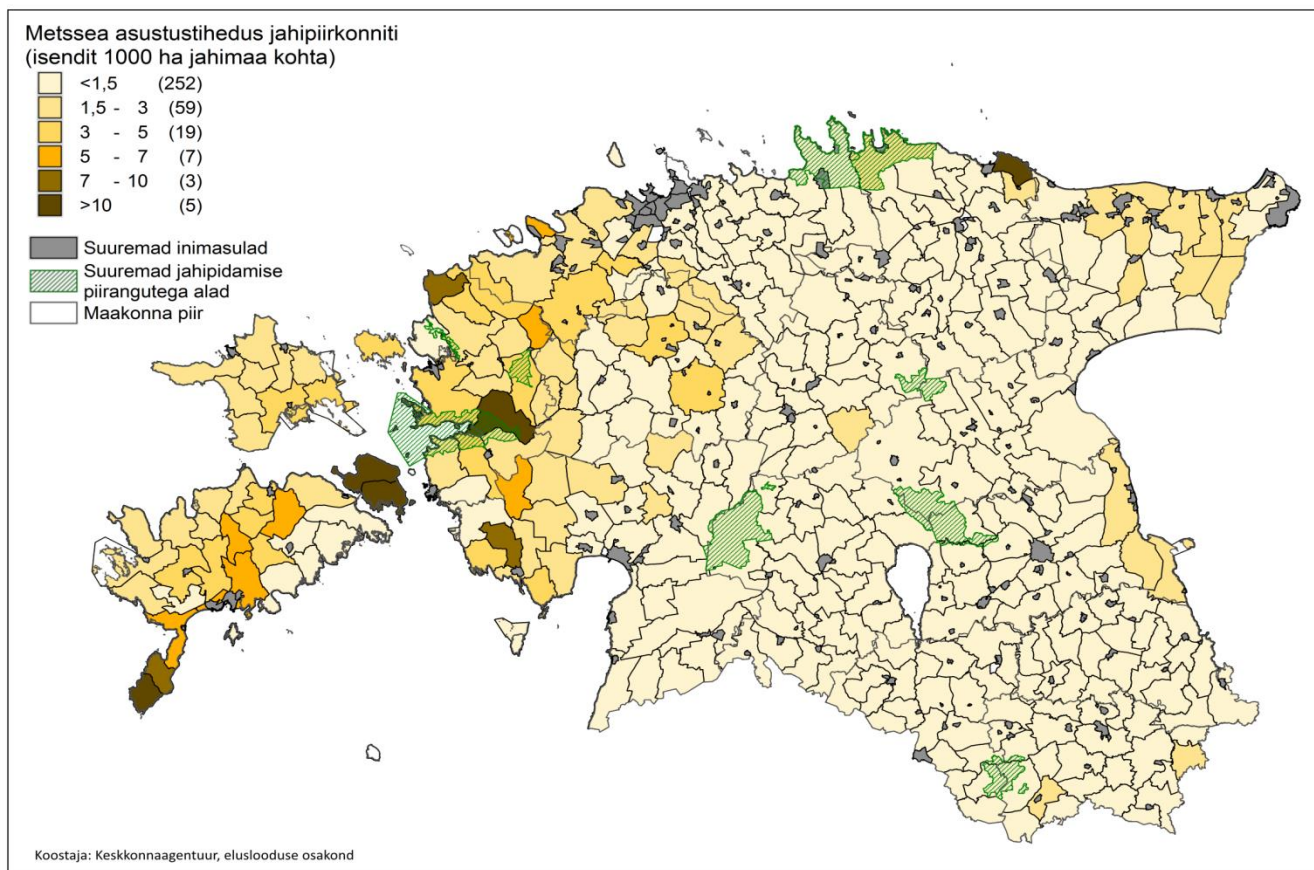
# Wild boar population density per 1000 ha hunting ground 2016

Wild boar population density (per 1000 ha hunting ground)





# Wild boar population density per 1000 ha hunting ground 2017

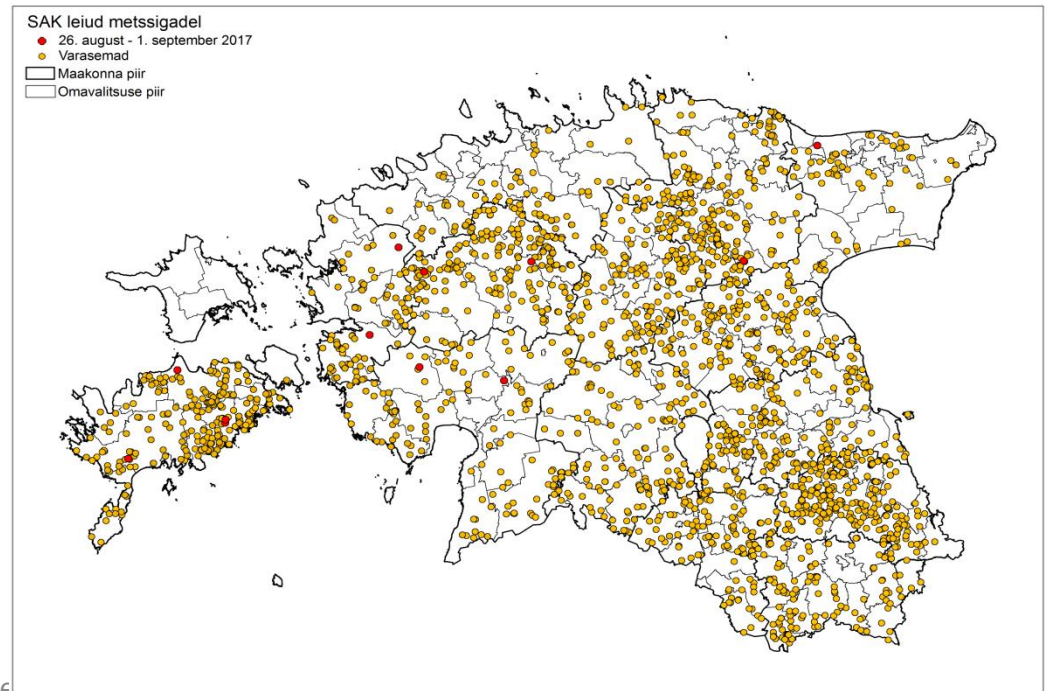




# Surveillance results in wild boars

- Laboratory testing 2014-2017

	2014		2015		2016		2017 (as of 31.08.2017)	
	No of animals tested	No ASF positive/prevalence	No of animals tested	No ASF positive/Prevalence	No of animals tested	No ASF positive/Prevalence	No of animals tested	No ASF positive/Prevalence
Hunted wild boars	879	9 (1%)	8617	680 (8%)	14976	749 (5%)	7129	398 (5,6%)
Found dead wild boars	175	64 (37%)	928	408 (44%)	987	818 (83%)	332	277 (83%)
Culled/car accident	2	0	17	7 (41%)	15	5 (33%)	19	1 (5.3%)
<b>Total</b>	<b>1056</b>	<b>73 (7%)</b>	<b>9562</b>	<b>1095 (11,5%)</b>	<b>15978</b>	<b>1572 (10%)</b>	<b>7480</b>	<b>676</b>



# Surveillance results in wild boar

County	Number of positive wild boars			Number of tested wild boars			
	PCR	ELISA	Both PCR and ELISA positive	Total number of tested wild boars	Found dead	Hunted	Culled
Harju	44	17	5	819	22	794	3
Hiiu				380	5	374	1
Ida-Viru	2	10		280	3	273	4
Jõgeva		13		52		52	
Järva maakond		6		40		40	
Lääne	74	24	10	1745	41	1701	3
Lääne-Viru	42	24	7	336	33	300	3
Põlva	1	3		24	1	22	1
Pärnu maakond	61	16	4	870	43	827	
Rapla	48	40	5	338	43	295	
Saare	217	69	40	2292	122	2169	1
Tartu	13	12	1	98	16	80	2
Valga		7		45		45	
Viljandi	3	5		79	2	76	1
Võru		1		82	1	81	
<b>TOTAL</b>	505	247	72	7480	332	7129	19





# Wild boar management

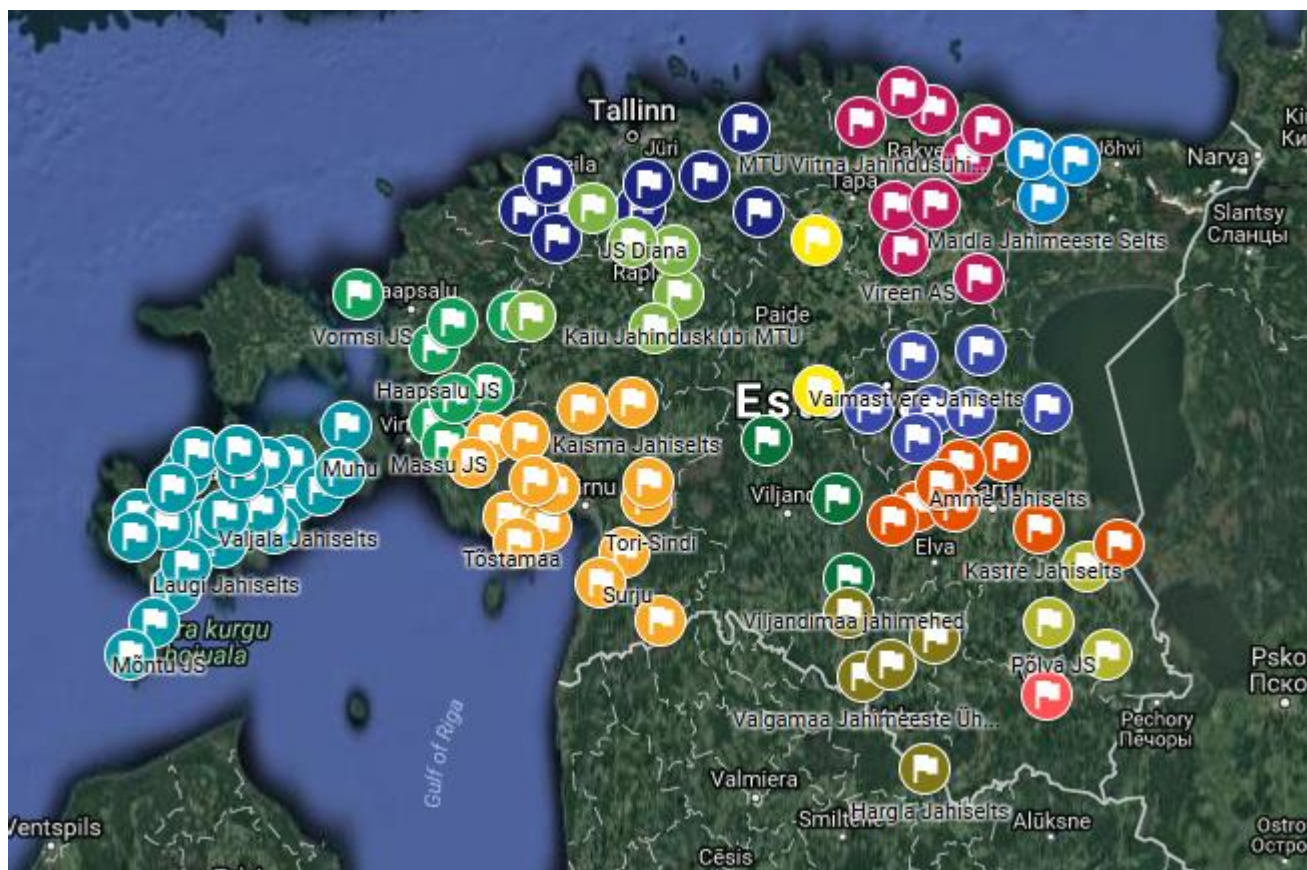
Hunting of wild boar : Hunting year 2017-2018  
as of 31.08.2017

Maakond	Hunting bag	Hunted	Sellest					Fulfilment %	% of the hunting structure			Restriction of carcass		Total fulfilment from the hunting bag %	
			Boars	Sows	Subadult boars	Subadult females	Piglets		Boars and subadult boars from adults	Sows and subadult sows from adults	Piglets from all hunting	Found dead and buried	Culled with the ASF signs		
Harjumaa	621	260	57	17	88	67	31	42	63	37	12	12	3	44	
Hiiumaa	1300	383	97	43	95	92	56	29	59	41	15	4		30	
Ida-Virumaa	301	32	9	5	6	11	1	11	48	52	3	2	4	13	
Jõgevamaa	91	14	7	0	4	3	0	15	79	21	0			15	
Järvamaa	70	29	9	2	8	8	2	41	63	37	7			41	
Läänemaa	1300	630	124	120	168	168	50	48	50	50	8	16	1	50	
Lääne-Virumaa	220	19	7	3	3	5	1	9	56	44	5	15		15	
Põlvamaa	82	5	1	0	1	2	1	6	50	50	20		1	7	
Pärnumaa	630	148	61	19	35	30	3	23	66	34	2	37		29	
Raplamaa	600	87	22	11	22	26	6	15	54	46	7	23		18	
Saaremaa	1900	919	169	106	319	258	67	48	57	43	7	74	1	52	
Tartumaa	150	19	7	1	8	3	0	13	79	21	0	5	2	17	
Valgamaa	81	19	9	1	4	3	2	23	76	24	11			23	
Viljandimaa	110	9	3	0	6	0	0	8	100	0	0	1	1	10	
Võrumaa	101	43	12	2	23	5	1	43	83	17	2	1		44	
<b>Total</b>	<b>7557</b>	<b>2616</b>	<b>594</b>	<b>330</b>	<b>790</b>	<b>681</b>	<b>221</b>	<b>35</b>	<b>58</b>	<b>42</b>	<b>8</b>	<b>190</b>	<b>13</b>	<b>37</b>	
			<i>Total plan</i>				<i>hunted</i>		<i>found dead</i>		<i>culled</i>		=		<b>4738</b>
			7557				- 2616		- 190		- 13				
Hunted, dead, culled total									2819						



# Wild boar management Container system

- Location of the containers





# Wild boar management

## Contracts with hunters

- In 2016 we had separate contracts (129) with hunting clubs for selective female hunting and carcass collection
  - Results: 4315 hunted sows and 1587 carcass removals (burials and container system)
- In 2017 we have one big contract with Estonian Hunters' Society for selective female hunting and carcass collection
  - By the end of August:
    - 1997 hunted females wild boars
    - 189 carcass burials
    - 505 carcasses taken to containers



# Wild boar management

## Additional feeding

- According to the Environmental Board Decree additional feeding is forbidden all year around, except for baiting (max 100 kg in feeding machine, on ground max 5 kg of feed per feeding slot/place; max 100 kg of feed per feeding slot/place per month)
- Baiting places must be at least 1 km away from each other and the additional feed has to be not more than 150 meters from the hunting tower
- For the 100 hectare of the hunting ground is allowed to have only one baiting place
- Baiting places must be registered





# Domestic pigs herd structure

## September 2014

Herd size category	No of herds	No of pigs
1-99	792	5039
100-499	24	4035
>=500	104	371 016
<b>Total</b>	<b>920</b>	<b>380 090</b>

## September 2016

Herd size category	No of herds	No of pigs
1-100	117	1302
101-499	17	4452
>500	71	263 242
<b>Total</b>	<b>205</b>	<b>268 996</b>

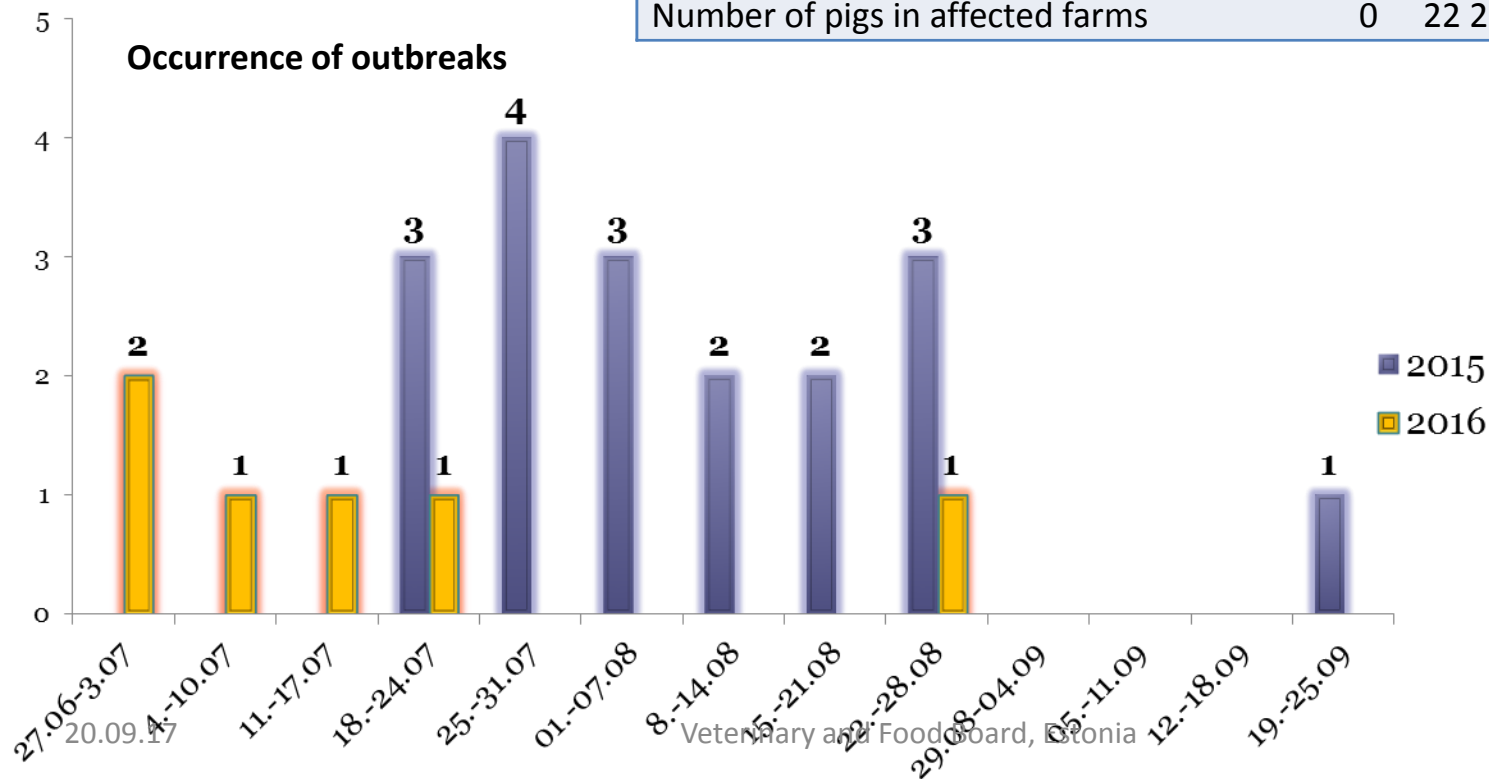
## March 2017

Herd size category	No of herds	No of pigs
1-99	64	1 225 (0,4%)
100-1000	16	
1001-10000	61	
>10000	2	
<b>Total</b>	<b>143</b>	<b>278 744</b>



# Domestic pig outbreaks 2015 – 2017

	2014	2015	2016	2017
Number of farms	920	450	205	143
<b>Number of outbreaks</b>	<b>0</b>	<b>18</b>	<b>6</b>	<b>3</b>
1-15		6	4	0
100 - 500		5	0	0
1 100 - 6 500		7	2	2
Number of pigs in affected farms	0	22 264	6812	13500





# ASF in domestic pigs

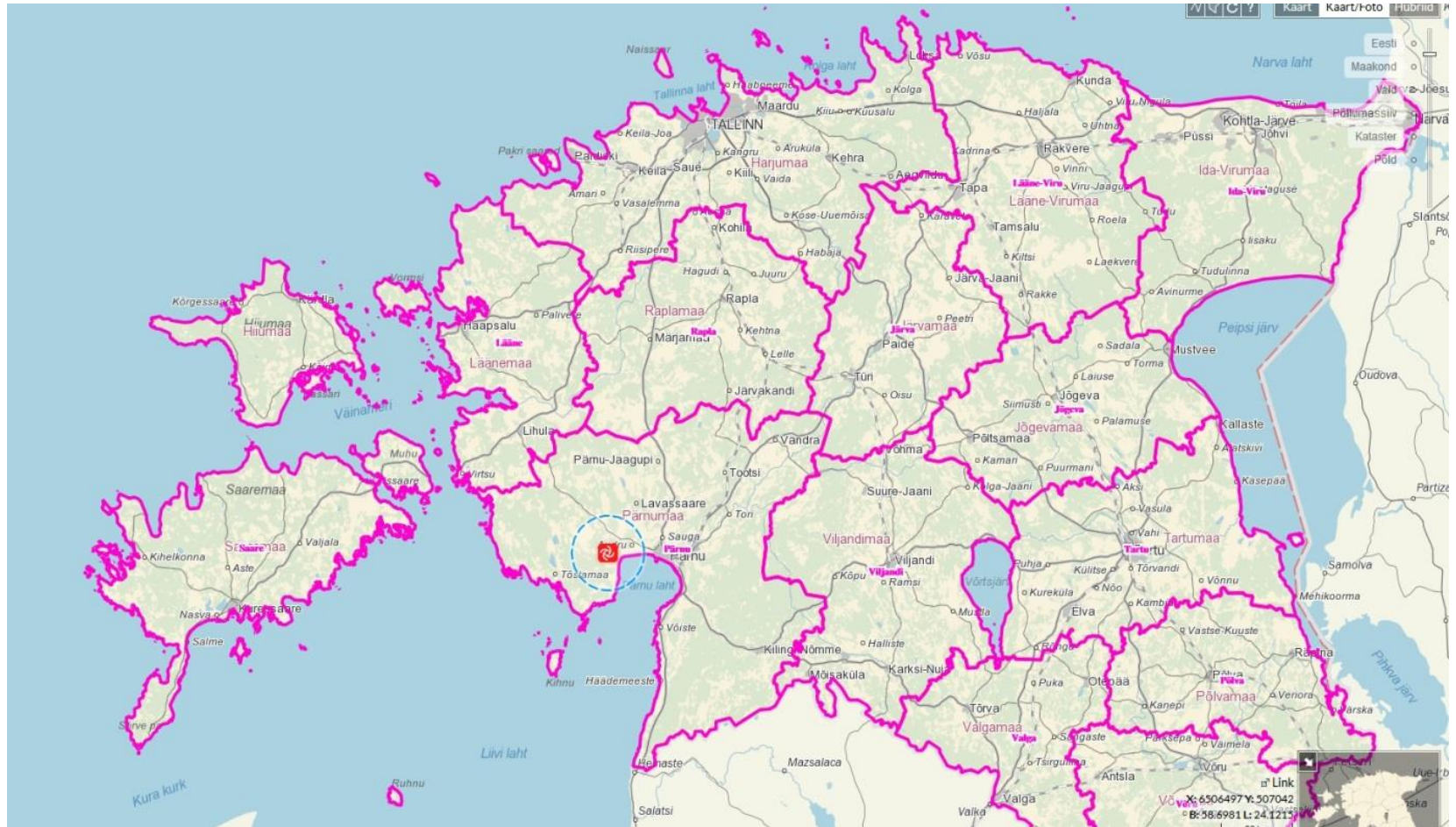
- Surveillance results in 2016 and 2017

	2016		2017 (as of 31.08.2017)	
	No of tested animals	No of ASF positive animals	No of tested animals	No of ASF positive herds
Domestic pig	8728	31	7431	2





# ASF outbreak 2017 N° 1





# Kihlepa ASF outbreak in 2017

- Confirmed on 14th of June in Pärnu county in a herd with 3415 pigs
- Clinical signs observed:
  - anorexia, dizziness, depression, fever
  - 4 dead pigs: autopsy → enlarged spleen, blood in intestines
- Source of the infection: most likely the virus was introduced with a small farm tractor transporting the bedding material into the pig keeping facilities
- The farm is located in an ASF wild boar infected area, where the infection is actively spreading among wild boar



# ASF outbreak 2017 N° 2





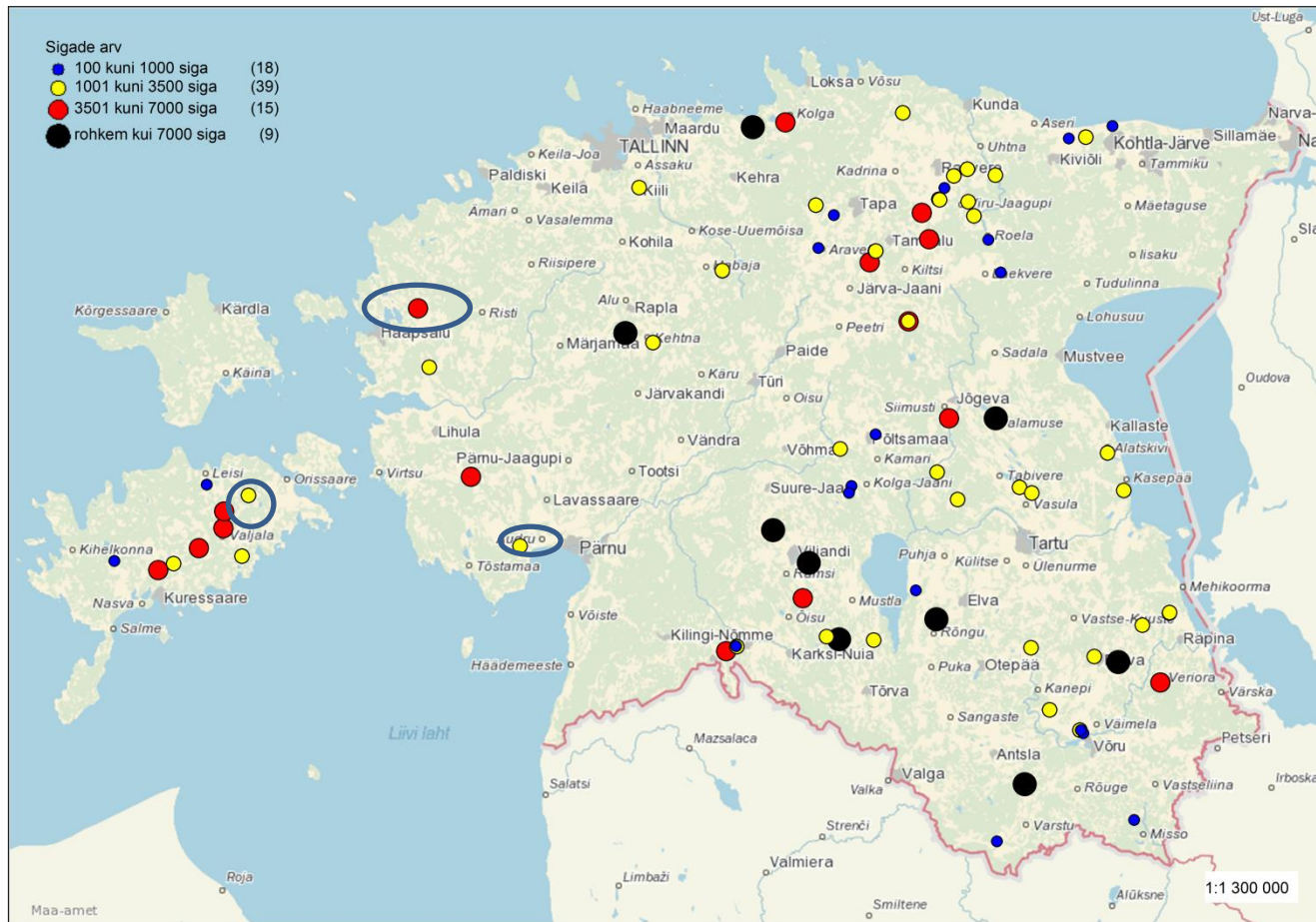
# Tagavere ASF outbreak in 2017

- Confirmed on 11th of July in Saaremaa county in a herd with 3232 pigs
- Clinical signs observed:
  - increased mortality, anorexia, dizziness, depression, fever
  - 10th of July 4 dead pigs: autopsy → enlarged spleen, blood in intestines
- Source of the infection: most likely the virus was introduced from the environment with a transportation or by the people, mistakes of the biosecurity.
- The farm is located in the island in ASF wild boar infected area, where the infection is actively spreading among wild boar.

# Linnamäe ASF outbreak in 2017

- Suspicion 18.09.2017
- Confirmation 19.09.2017
- 10 blood samples PCR positive
- 4 organ samples PCR positive
- ELISA negative
- 7 dead sows,
- 6860 pigs

# Pig farms in Estonia (27.07.2017)





# Controls/inspections in 2017

- Control checks in all pig farms in March 2017
  - Aim of the controls: implementation of biosecurity rules
  - Total number of pig farms inspected: 194, from which 143 kept pigs
  - Results: 9 prescriptions, from which 7 were about improving fencing
- Inspections in hunting lodges
  - All hunting lodges
  - During 2017 July and August
  - Aim of the controls: implementation of biosecurity rules during hunting; getting an overview of the possibilities in hunting lodges (cold storage, management of ABP etc)



# Expert Committee 2016/2017

- Decree of the DG 27.09.2016 N°123
- Benchmarking of the application of biosecurity (BS) requirements
- University of Life Sciences, MoRA, pig breeders and producers associations, VFB





# Outcomes and observations

- February – April 2017 – 29 farms were visited
- Majority of assessed farms were compliant to the basic BS requirements, in many cases even more stringent measures were applied
- There are no major differences in interpretation of BS requirements by official veterinarians
- More attention should be paid to the effectiveness of the measures , e.g. disinfection
- Improvement of quality of the BS requires additional investments, the possibility for support should be sought

# Lessons we have learned

- Risk factors:
  - High density of infected wildboar
  - Seasonality
  - Human activities connected to the forests
- Infectiousness and speed of the spread of disease is not very high and depends on individual susceptibilities;
- Progression of the disease could be in different forms, without classical clinical signs of ASF

# Thank you for your attention!

[www.vet.agri.ee](http://www.vet.agri.ee)

[www.seakatk.ee](http://www.seakatk.ee)