

ASF in 2016

Estonia

PAFF meeting 13-14.09.2016

General overview of the year 2016:

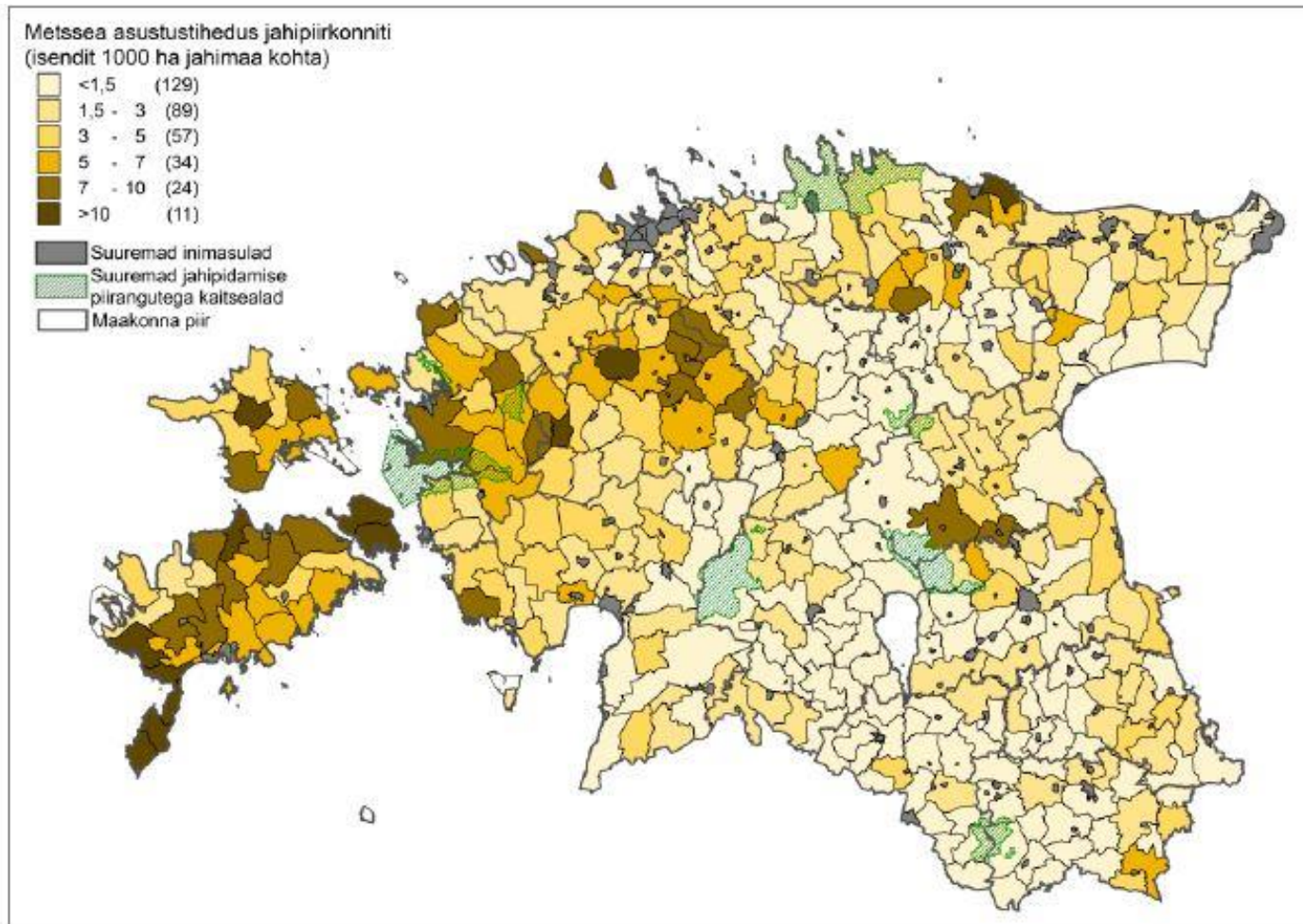
- 4 new infected areas in wild boar
- 6 new outbreaks in domestic pigs
 - 4 backyards
 - 2 large farms

ASF in wild boars

Infected areas as of 08.09.2016



ASF in wild boars, density of the population (2016)



ASF in wild boars

Preventive measures

- Selective hunting of female wild boars and removal of dead wild boar carcasses
 - Started in January 2016
 - Contracts with 124 hunting clubs/society
 - January to July 2838 female wild boars have been hunted
 - January to July 975 wild boar carcasses have been removed (826 buried and 149 taken to containers)

ASF in wild boars

New preventive measures

- Decree of Environmental Board from 31.08.2016
 - From sub-adults and adults 50% of wild boars shot must be females and if possible, 50% of piglets
 - 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)
 - Feeding places must be registered
- Driven hunts are allowed

ASF in wild boars

Laboratory testing (as of 08.09.2016)

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	12	5	1	859	8	851	
Hiiu				13	3	10	
Ida-Viru	9	15	3	591	9	582	
Jõgeva	138	33	13	943	106	837	
Järva maakond	93	22	7	776	64	711	1
Lääne				669	4	665	
Lääne-Viru	129	34	20	1381	80	1301	
Põlva	166	25	13	716	133	583	
Pärnu maakond	41	17	4	827	39	788	
Rapla	99	13	4	2210	81	2129	
Saare	2			137	9	128	
Tartu	149	45	13	657	142	515	
Valga	9	12	3	152	7	145	
Viljandi	31	14	1	516	23	493	
Võru	39	22	7	484	30	451	3
TOTAL	917	257	89	10931	738	10189	4

ASF in wild boars

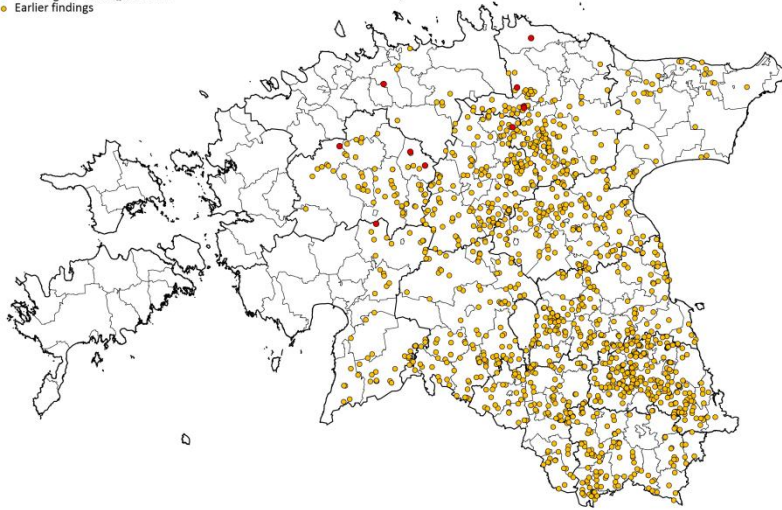
Laboratory testing in 2015

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				165	3	162	
Hiiu				23	5	18	
Ida-Viru	10	26	0	502	30	462	10
Jõgeva	55	7	2	549	43	506	
Järva	99	16	12	1032	60	972	
Lääne				255	4	251	
Lääne-Viru	82	16	7	757	56	701	
Põlva	226	18	12	1183	193	990	
Pärnu	23	5	1	538	36	501	1
Rapla	6	0	0	1005	17	987	1
Saare				68	11	57	
Tartu	116	13	5	697	117	580	
Valga	112	29	17	784	105	679	
Viljandi	166	25	17	1198	158	1037	3
Võru	108	18	8	809	93	714	2
TOTAL	1003	173	81	9565	931	8617	17

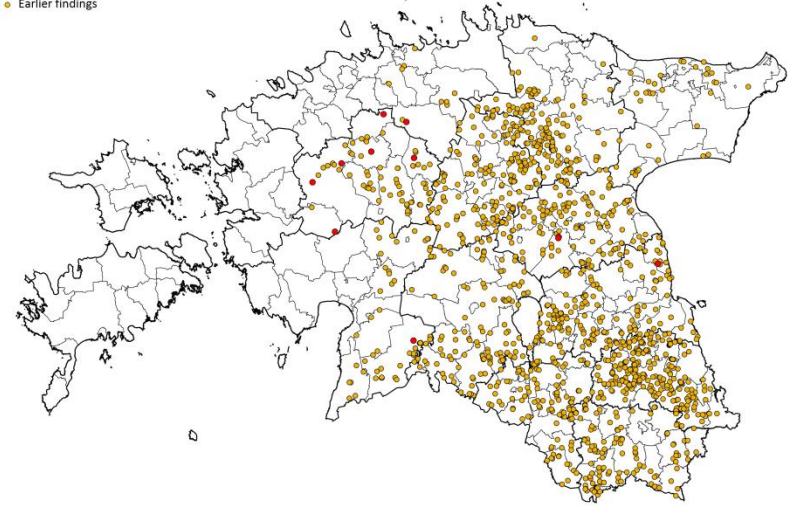
ASF in wild boars

Positive wild boar locations in 4 weeks of August

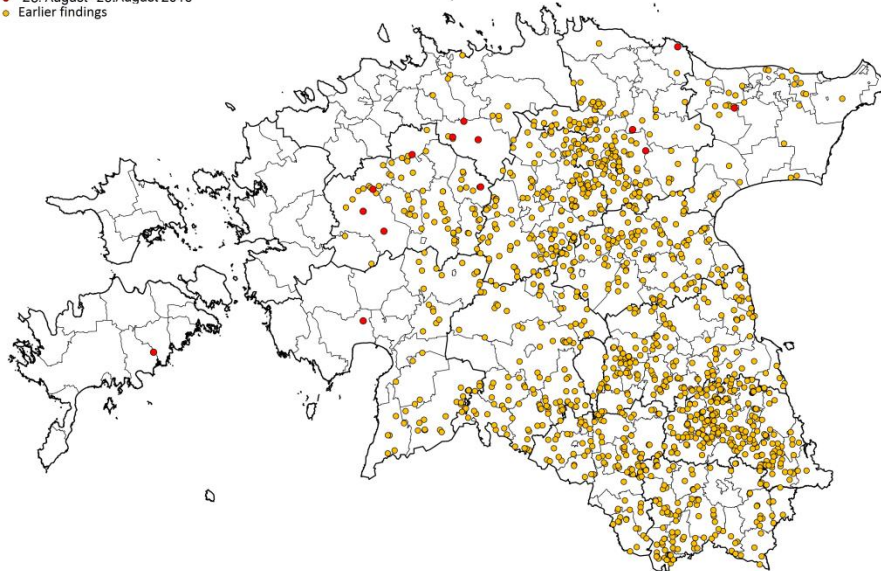
ASF in wild boars
● 06. August -12. August 2016
● Earlier findings



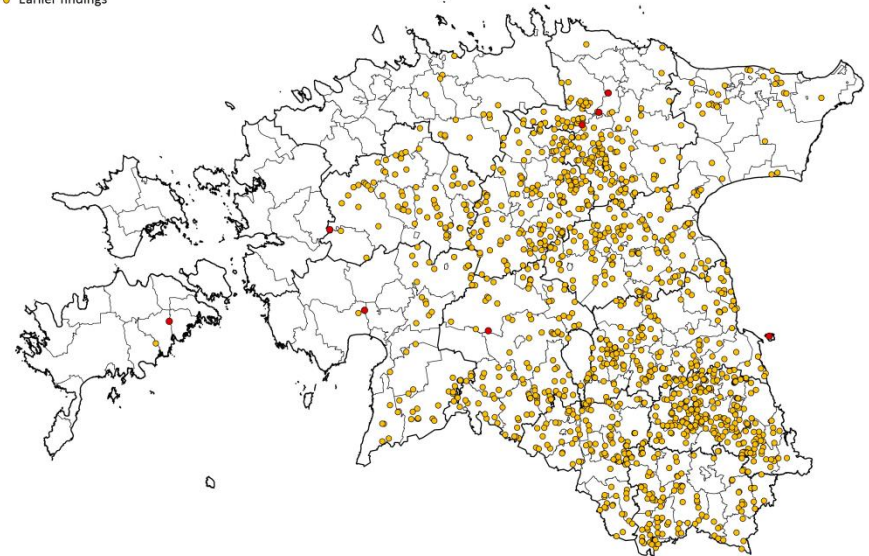
ASF in wild boars
● 13. August -19. August 2016
● Earlier findings



ASF in wild boars
● 20. August -26. August 2016
● Earlier findings



ASF in wild boars
● 27. August - 2. September 2016
● Earlier findings

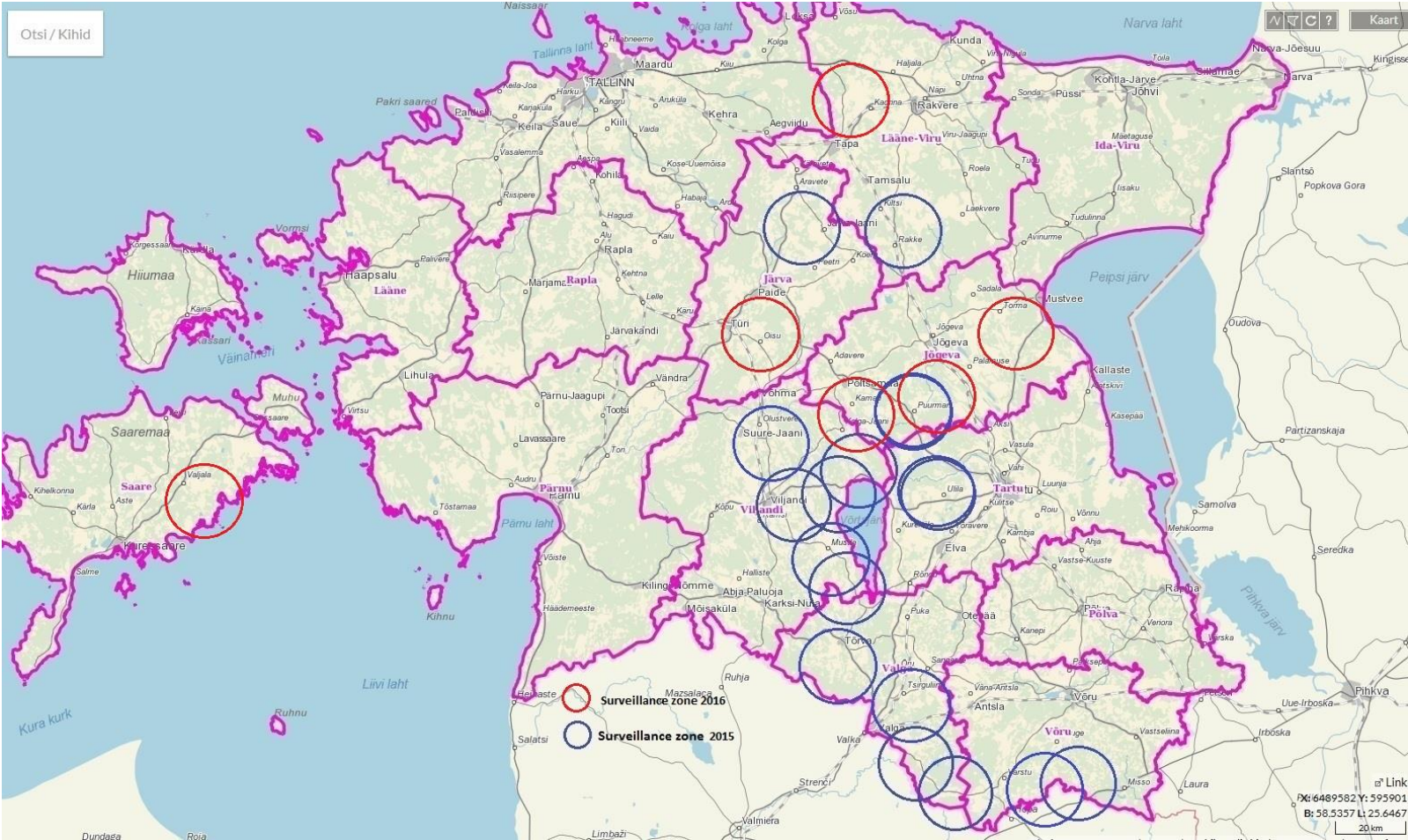


ASF in domestic pigs

No of outbreak	Location	Date of confirmation	Number of pigs
1	Puurmanni parish, Jõgeva county	01.07.2016	6
2	Põltsamaa parish, Jõgeva county	01.07.2016	7
3	Saarde parish, Jõgeva county	04.07.2016	3
4	Türi parish, Järvamaa	11.07.2016	5
5	Kadrina parish, Lääne-Viru county	20.07.2016	4091
6	Valjala parish, Saare county	23.08.3016	2700

ASF in domestic pigs

Surveillance zones of the outbreaks in 2015 and 2016



ASF in domestic pigs

Outbreak No 1

- **Outbreak No 1** – Puurmanni parish, Jõgeva county
 - 6 pigs
 - On 25.06 one pig with loss of appetite, dullness
 - On 27.06 no improvement, temp 39 C, some additional pigs show loss of appetite and dullness
 - On 29.07 owner called veterinarian, who carried out clinical examination and took blood samples.
 - On 30.06 pig died, veterinarian carried out autopsy and took organ samples
 - On 01.07 laboratory confirmed ASF diagnose
 - Possible entrance routes of infection:
 - Inadequate disinfection barriers
 - Bovines had access to pig farm territory
 - Pigs were let to be outside in fenced area for short times

ASF in domestic pigs

Outbreak No 2

- **Outbreak No 2** – Põltsamaa parish, Jõgeva county
 - 7 pigs
 - On 30.06 the owner notified veterinarian about dead fattening pig. Before death the pig had loss of appetite and dullness. Veterinarian carried out autopsy and took samples
 - On 01.07 laboratory confirmed ASF diagnose
 - Possible entrance routes of infection:
 - No proper fencing
 - No disinfection barriers for humans and vehicles
 - Keeping bovines at same place (bovines went to pastures)

ASF in domestic pigs (4)

Outbreak No 3

- **Outbreak No 3** –Saare parish, Jõgeva county
 - 3 pigs
 - 02.07 one pig showed loss of appetite and dullness, 03.07 owner called veterinarian who carried out clinical examination (temp 40,2 C). In the afternoon pig died and veterinarian carried out autopsy and took samples
 - 04.07 laboratory confirmed ASF and
 - Possible entrance routes of infection:
 - Inadequate biosecurity measures
 - No changing of clothes, no hand cleaning and disinfection
 - Green fodder and swill feeding

ASF in domestic pigs

Outbreak No 4

- **Outbreak No 4** –Saare parish, Jõgeva county
 - 5 pigs
 - 07.07 owner noticed that sow had loss of appetite
 - 08.07 veterinarian carried out clinical examination, no fever was detected
 - 10.07 the sow died and veterinarian carried out autopsy and took samples
 - On 11.07 laboratory confirmed ASF diagnose
 - Possible entrance routes of infection:
 - Inadequate biosecurity measures
 - No disinfection barrier at back door
 - No change of clothes at pig farm holding
 - Green fodder feeded to bovines (near feeding place of pigs), swill feeding

ASF in domestic pigs

Outbreak No 5

- Kadrina parish, Lääne-Viru county
- 4091 pigs, full cycle
- On 14.07 the owner of the farm needed veterinary certificate but as 2 pigs had died the veterinarian took samples which were ASF negative
- 18.07 one of the workers notified farm director about increased mortality and loss of appetite, dullness and fever in pigs
- 18.07 veterinarian carried out autopsy on 6 pigs and took samples
- 20.07 ASF was confirmed
- Possible entrance routes of infection:
 - Inadequate biosecurity measures
 - Inappropriate disinfection barrier
 - Insufficient fencing
 - Inappropriate handling of feed

ASF in domestic pigs

Outbreak No 6

- Valjala parish, Saare county
- 2700 fattening pigs
- 16.08 the first pig with loss of appetite was noticed
- 18.08 1st dead pig, on 19.08 additional 2 pigs died in same section and on 20.08 additional 2 pigs died in same section, mortality rate kept increasing
- 22.08 veterinarian of the farm notified the authorised veterinarian
- 22.08 autopsy was carried out and samples were taken
- 23.08 laboratory confirmed ASF diagnose
- Possible entrance routes of infection:
 - Inadequate implementation of biosecurity measures
 - Inadequate fencing

ASF in domestic pigs

Outbreak investigations-conclusions

- Epidemiological investigation done by University of Life Sciences
- Results:
 - Possible source of infection
 - Insufficient fencing
 - Lack of disinfection barriers
 - Lack of following requirements of feed (green fodder, storage of animal feed)
 - Clinical signs were detected: increased mortality, increased temperature, loss of appetite

Farm controls in June 2016

- Carried out by animal health specialists from county veterinary centre
- Total number of farms inspected:233
- Purpose of the farm controls
 - Inspect if compulsory biosecurity measures are implemented correctly (feed, biosecurity plan, disinfection barrier etc)
- 50 farms received precept
 - Improve biosecurity plan and record measures
 - Improve disinfection barrier
 - Finish pig farming
 - Improve fencing
- After the follow-up inspection all pig farms are in compliance with the requirements prescribed or finished the pigkeeping.

Thank You!