

# EUVET MEETING ON AFRICAN SWINE FEVER SITUATION IN THE WESTERN BALKAN COUNTRIES

- **Place:** Croatia
- **Date:** 11 – 13 July 2023
- **The Team:**
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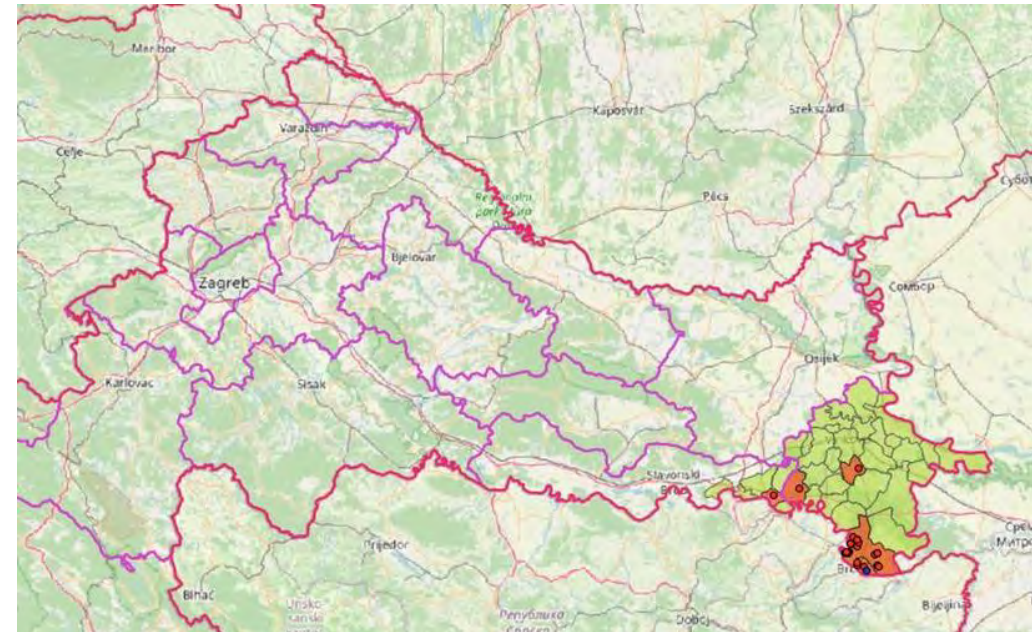
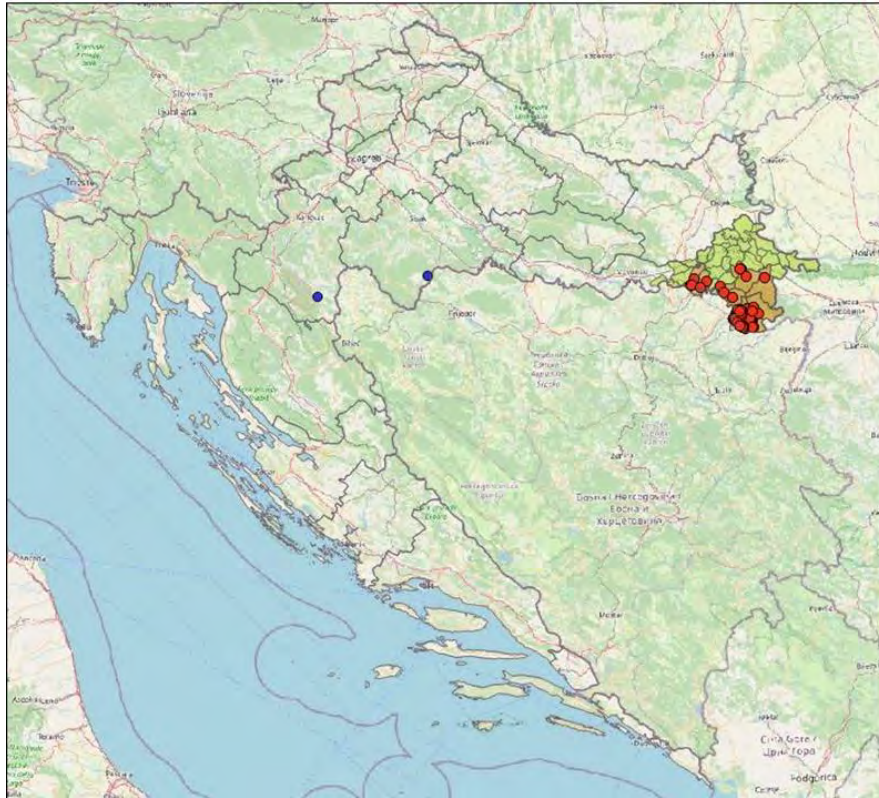


# Terms of Reference of the African swine fever EUVET mission to Croatia from 11 to 13 July 2023

- 1st day, meeting at National Veterinary Office in Zagreb with all the administrations involved in the control of ASF. In the afternoon travel to Vukovar region.
- 2nd day, field visit:
  - the first 2 outbreaks of ASF (Posavsky Podgasci village),
  - the hunting ground with the first positive wild boar (Mašano – Gunja)
  - the outbreak of Privlaka which, at the time of the visit, was the only one distant and isolated from the primary cluster of infection.
- 3rd day – travel to Zagreb and final meeting with Vet Authorities.

# Croatia: ASF situation as of 13 July 2023: 40 ASF outbreaks and 3 cases in WB

- June 26th, 1° case in DP
- July 5th, 1° case in WB



**30.08.2023**  
594 outbreaks

# Domestic pig farms census / County: last updated in 2019

County	No. of establishments	No. of pigs
Bjelovarsko-bilogorska	5119	83660
<b>Brodsko-posavska</b>	<b>4896</b>	<b>117064</b>
Dubrovačko-neretvanska	7	32
Grad Zagreb	882	8985
Istarska	1455	7634
Karlovačka	3670	22897
Koprivničko-križevačka	4632	82161
Krapinsko-zagorska	8043	37052
Ličko-senjska	577	2570
Međimurska	2404	38652
<b>Osječko-baranjska</b>	<b>8030</b>	<b>348402</b>
Požeško-slavonska	2545	37629
Primorsko-goranska	87	740
Sisačko-moslavačka	5885	59075
Splitsko-dalmatinska	851	6889
Šibensko-kninska	93	1373
Varaždinska	5739	57553
Virovitičko-podravska	3868	40622
<b>Vukovarsko-srijemska</b>	<b>6567</b>	<b>199472</b>
Zadarska	187	1903
Zagrebačka	7579	110189
Total	73116	1264554

- No distinction between commercial and non-commercial, any farm can market pigs
- 10 / 40 outbreaks identified at the time of the mission occurred in unregistered farms
- the first 2 outbreaks were not registered as free-range

# ASF surveillance activities from 2019 to 2022

Year	Kept pigs' passive surveillance (dead pigs and abortion)	Wild boar active surveillance	Wild boar passive surveillance	Positive (all QRT – PCR)
2019	4250	3177	75	0
2020	9400	3699	68	0
2021	8045	5068	69	0
2022	7595	5171	146	0

- Certain surveillance and control activities are risk based which, given the characteristics of the disease is appropriate.
- However, to be effective, these activities need to be supported by an up-to-date and detailed herd registration system, e.g.:
  - 10/40 outbreaks not registered in national database
  - the first 2 outbreaks not registered as free-range and not selected for surveillance

# ASF surveillance data for period Jan 1 – July 13 2023

County	Total tested establishments	Positive establishments	Total tested samples	Positive samples
Bjelovarsko-bilogorska	57	0	146	0
Brodsko-posavska	126	3	617	4
Grad Zagreb	7	0	24	0
Karlovačka	7	0	15	0
Koprivničko-križevačka	123	0	472	0
Krapinsko-zagorska	28	0	34	0
Međimurska	46	0	295	0
Osječko-baranjska	142	0	1504	0
Požeško-slavonska	3	0	3	0
Sisačko-moslavačka	3	0	4	0
Varaždinska	33	0	70	0
Virovitičko-podravska	5	0	7	0
Vukovarsko-srijemska	117	70	1062	336
Zagrebačka	56	0	441	0
<b>Total</b>	<b>753</b>	<b>73</b>	<b>4694</b>	<b>340</b>

# Wild boar data: registred in a central database

CRO	PARENT FUND	HUNTING BAG
2018/19	29.807	38.702
2019/20	26.522	44.570
2020/21	26.128	41.120
2021/22	25.732	52.464
2022/23	Available during July 2023.	48.893
2023/24 do 30.06.23.	-	7.239

Hunting ground (HG)	HG number	Area (km <sup>2</sup> )	Parent fund-planned (PFP)	Parent fund-realized (PFR)	PD planned (PFP / km <sup>2</sup> )	PD realized (PFR / km <sup>2</sup> )
UKUPNO (km <sup>2</sup> )		2.479,32	1.319,00	810,00	0,532001	0,326702

For the county where the 1st infected boar was detected, it is reported a pre-reproductive estimate of 0,32. Even if this estimate were considered doubled (post-reproductive), the density would still be quite low.

# ASF surveillance data for period Jan 1 – July 13 2023

## WB

Active surveillance on hunted wild boars is encouraged in the territories bordering 3rd countries, considered at risk for ASF introduction, since CSF.

Active surveillance healthy hunted WB	
County	No. of samples
Brodsko-posavska	355
Dubrovačko-neretvanska	4
Karlovačka	260
Ličko-senjska	56
Osječko-baranjska	193
Sisačko-moslavačka	880*
Splitsko-dalmatinska	36
Šibensko-kninska	63
Vukovarsko-srijemska	352
<b>Total</b>	<b>2199</b>

\*one positive (healthy hunted WB)

Passive surveillance including road kill	
County	No. of samples
Brodsko-posavska	2
Grad Zagreb	8
Istarska	13
Karlovačka	9*
Koprivničko-križevačka	3
Krapinsko-zagorska	3
Ličko-senjska	9
Osječko-baranjska	4
Požeško-slavonska	1
Primorsko-goranska	3
Sisačko-moslavačka	11
Splitsko-dalmatinska	1
Varaždinska	1
Vukovarsko-srijemska	8**
Zagrebačka	7
<b>Total</b>	<b>83</b>

\*one positive (road kill WB)

\*\*one positive (sick WB)



# First occurrence of ASF in Croatia, in pigs

- Posavski Podgajci
- 2 outbreaks
- June 26, 2023



# Posavski Podgajci: first ASF outbreaks in Croatia:

- The first 2 outbreaks occurred almost simultaneously
- Two establishments with an outdoor pig rearing system but not registered as free range. Therefore, not selected as high risk for surveillance.
- The farms are very close to each other and located in a swamp area about 100 meters from the Bosnian border which is defined by a river
- In the two outbreaks it was difficult to carry out the final census because located in a marshy area, the animals could have died in the swamp without being found.
- One of the 1 farms was fenced off and had minimal biosecurity measures). In the other, the biosecurity measures were very poor. Most probably this farm was the 1 st outbreaks (mortality trend, evidence of Abs), evidence of infection early June.

# Posavski Podgajci: first ASF outbreak (45 pigs)



Privlaka: at the time of the visit, was the only the only outbreak far from primary cluster of infection and

- the infection was identified in a herd of **121 pigs**.
- The disease manifested itself in 3 of the 16 pigs purchased and introduced into the farm in a time compatible with the incubation period of the disease.
- The herd of origin of the animals tested negative for ASF but the infection could have been contracted by the pigs on the vehicle used to transport the animals.
- At the time of the visit in the outbreak of Privlaka, the VS informed us that there were already other suspicions of ASF in the area.

# Hunting Ground (Mašano – XVI/108) - 1<sup>st</sup> ASF detection in WB 5<sup>th</sup> July 2023

- the positive WB was a female of about 50 kg, found sick
- The Bosnian border is about 800-1000 mt from the point where the WB was found
- A corridor connecting Bosnia and Croatia in the middle of swamp



# CONCLUSIONS AND RECOMMENDATIONS

## Positive Findings:

- At the central level there is good cooperation between the Administrations involved in ASF management
- The forestry, hunting management and veterinary service are under the same Ministry (Ministry of Agriculture) and this is evident in the way the activities are well coordinated between the services
- The Central Laboratory is accredited for the diagnosis of ASF, well informed on the procedures to be followed, aware of its laboratory capacity and well-coordinated with the field branches
- Detailed wildlife information is centrally available and publicly accessible on the Internet
- Hunters are aware of the rules and procedures to follow in case of ASF

# CONCLUSIONS AND RECOMMENDATIONS

## Findings:

- **The pig census** was last updated in 2019, currently is incomplete and even for some of the farms registered, the information on the characteristics of the holding is no longer adequate (10/40 outbreaks occurred in unregistered farms).
- The weakness of the farm census has an unfavorable **impact on surveillance and control actions** (tracing, movement control, effectiveness of restrictions). While inaccuracies in recording herd characteristics have a negative impact on risk-based control activities (biosecurity, surveillance). Two of the first outbreaks were not controlled because according to their classification were not at risk. Instead, the animals were raised outdoors, in an area (border with Bosnia and Serbia) at risk of introducing ASF.
- In the event of ASF outbreaks, the **protection and surveillance zones must be established and a census of the farms** falling within these zones **must be carried out**. To identify the unregistered holdings and immediately place them under restriction.
- Based on the information reported, field veterinarians may have contributed to the spread of the infection between herds. This must be taken into due consideration when planning training activities and awareness campaigns.
- When managing outbreaks, care should be taken to avoid further spread of infection. Signs indicating the presence of infection on the premises should be posted, and the entrance close. The same behavior must be held when the infection is detected in a hunting ground.
- Control activities (surveillance, biosecurity) at central level are well conceived but there are difficulties in implementing them in the field.

# Recommendations

- The **farm census must be updated**. Its deficiencies have a negative impact on all the control activities carried out and make the management of an emergency extremely difficult.
- Passive surveillance needs to improve in wild boar, as well as carcass search when infection is identified in the wild.
- When the disease is identified in wild boar, forestry activities should be placed under control or restricted.
- The central vet authorities must follow the application of the control measures on the territory.
- A training and awareness campaign in relation to ASF, disease prevention, management (including epi investigations) should be organized for veterinarians, farmers and stakeholders.



## The EUVET Team:



We would like to thank our Croatian colleagues for their support during the mission. The working atmosphere during the mission was excellent and colleagues gave all their assistance to facilitate the mission.