Mission of the Community Veterinary Emergency Team (CVET) to Romania

(6-8 June 2018)

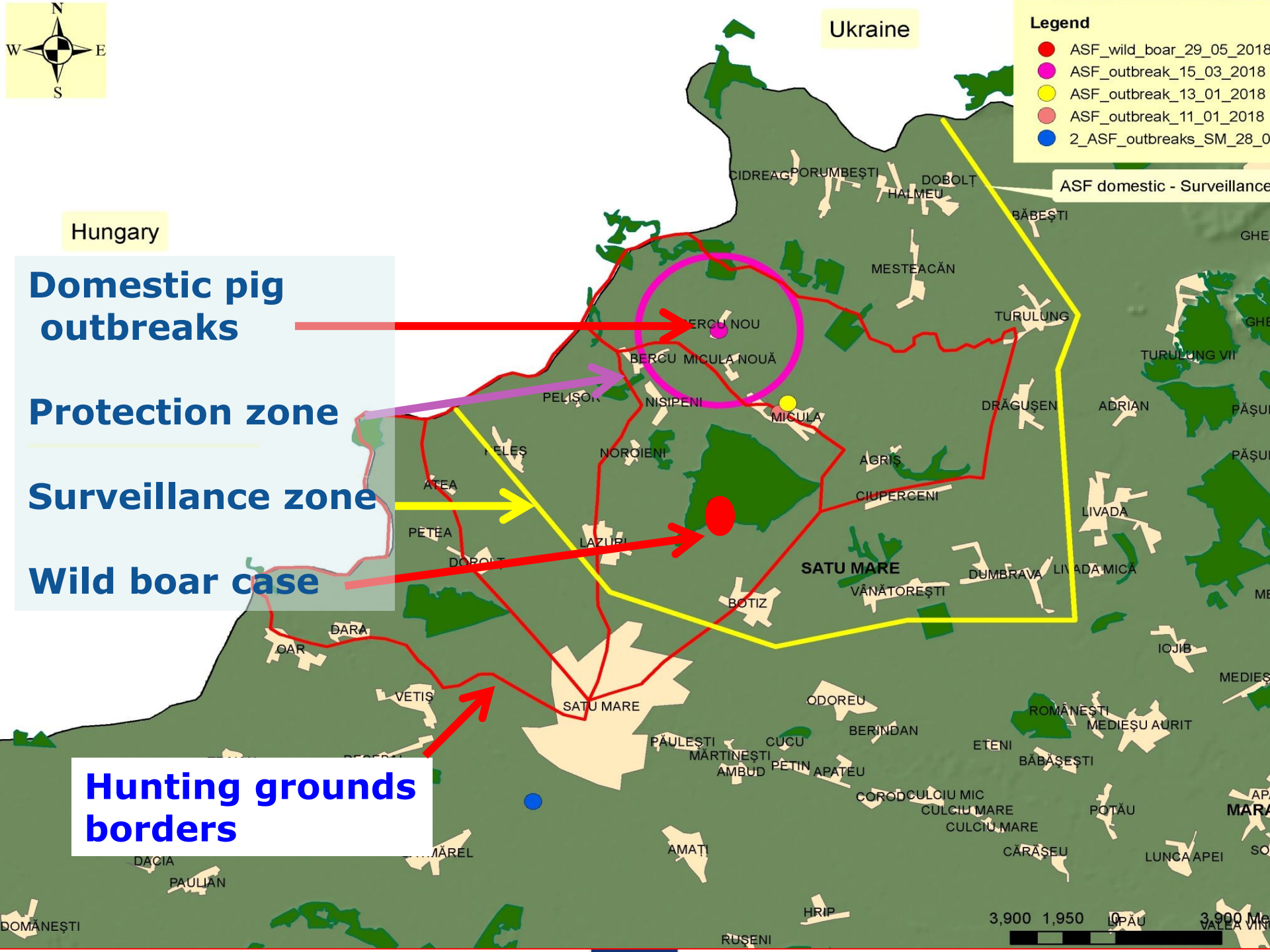
Objective

- **Reason of the mission: occurrence** of ASF in the Noroieni Hunting Ground (Satu Mare county)
- **ToR: provide assistance** to the scientific, technical, managerial and practical on-the-spot assistance on the refinement of the most suitable control and eradication measures for African Swine Fever (ASF) under local conditions, especially **as regards wildlife management and epidemiological investigations**.
- **Expert**: Vittorio Guberti (ITA), Petr Satran (CZ)

Background

Epidemiological evaluation:

- A dead wild boar was found in the Noroieni Hunting ground on 24th May, the animal was sampled and tested positive in LSVSA Satu Mare and finally confirmed ASF positive on 29th May by the NRL.
- The source of virus introduction is not clear and still under investigation;
- The whole area was already under restriction due to a domestic pig outbreaks (13th March 2018, non professional holding); restrictions should have lifted on 30th June.


Ukraine
Hungary
Legend
ASF_wild_boar_29_05_2018
ASF_outbreak_15_03_2018
ASF_outbreak_13_01_2018
ASF_outbreak_11_01_2018
2_ASF_outbreaks_SM_28_0
ASF domestic - Surveillance
Domestic pig outbreaks
Protection zone
Surveillance zone
Wild boar case
Hunting grounds borders
SATU MARE
CIDREAG
PORUMBEŞTI
DOBOLT
HALMEU
BĂBEŞTI
MESTEACĂN
TURULUNG
BERCU MICULA NOUĂ
NISIPENI
MICULA
DRĂGUŞENI
ADRIAN
TURULUNG VII
NORDIENI
AGRIŞ
CIUPERCENI
LIVADA
PETEA
LAZURI
DUMBRAVA
VÂNĂTOREŞTI
BOTIZ
DARA
OAR
VETIŞ
IOJIB
ODOREU
BERINDAN
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CORODCULCIU MIC
CULCIU MARE
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AMAŢI
CĂRĂŞEU
LUNCA APEI
DACIA
PAULIAN
HRIP
RUŞENI
3,900 1,950 0 3,900 Me

Background

- The dead wild boar was found by chance in the Noroieni Hunting in proximity of the Hunting Lodge;
- The hunting ground is managed by Romsilva, the state enterprise that manages state forests and related activities including hunting.
- Samples were taken by an authorised Veterinarian;
- The carcass was incinerated after sampling;
- The positive animal was a female of about 1 year of age; the carcass was fresh;

Wild boar population

At the date of 1st March, in the whole Satu Mare county 2502 wild boars were estimated (0,56/km^2);

35 in the infected hunting ground (0,54/km^2);

At present the local wild boar population size is at least double (post reproductive period).

Wild boar population estimates are obtain through traditional, unstandardized methods aimed in maintaining an optimal wild boar density determined for each Hunting ground by central authorities.

A limited time series of the wild boar estimates hardly matches the natural wild boar population dynamic;

Surveillance

In the whole surveillance zone (set after the domestic outbreak) including the wild boar infected hunting ground

PASSIVE SURVEILLANCE (11.01 – 21.05)

41 suspected cases in domestic pigs (all negative)

3 dead wild boars (all negative)

ACTIVE SURVEILLANCE (25.02 – 31.05)

1171 domestic pigs (all negative)

304 wild boars (all negative)

Epidemiological hypotheses

The CVET carried out the mission considering three main epidemiological hypotheses

A) Focal introduction

B) Undetected - local - ASF persistence in back yard and/or wild boar following the last outbreak detection

C) Epidemic wave in wild boar from infected areas

Considering:

The recent ASF primary outbreaks were determined by multiple introductions of the virus via products from Ukraine (11th January, 13th March 2018) ruling out the local circulation of the virus;

The epidemiological situation in UA, followed by detection of ASF in wild boar in Hungary;

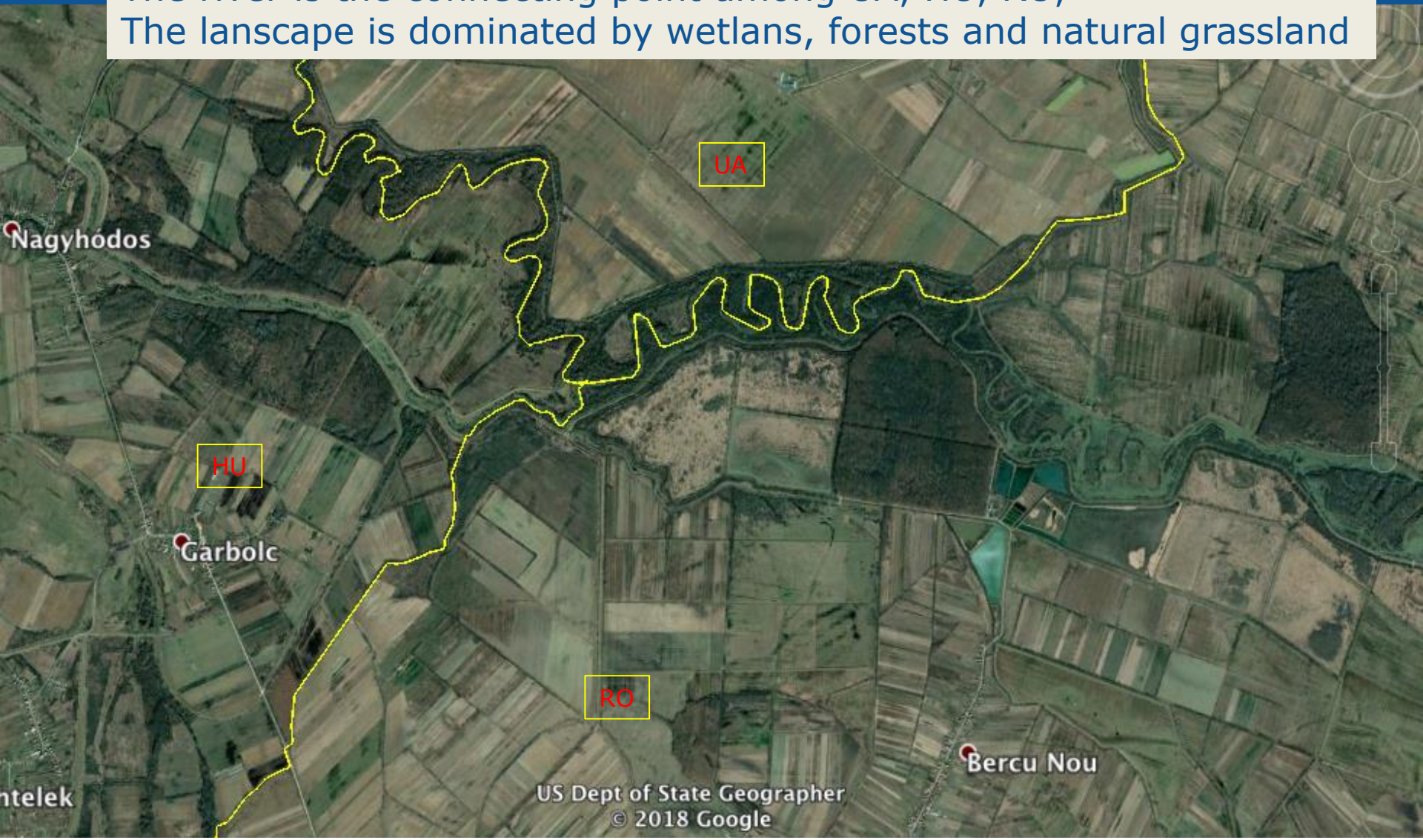
The presence of the TURU River Natural Preserve that connects three countries (RO, HU, UA) in continuity with the Hungarian Szatimar-Bereg protected area;

The very dense vegetation cover and the presence of several water bodies, that may prevent the detection of wild boar carcasses;

The prohibition of many human activities (hunting included);

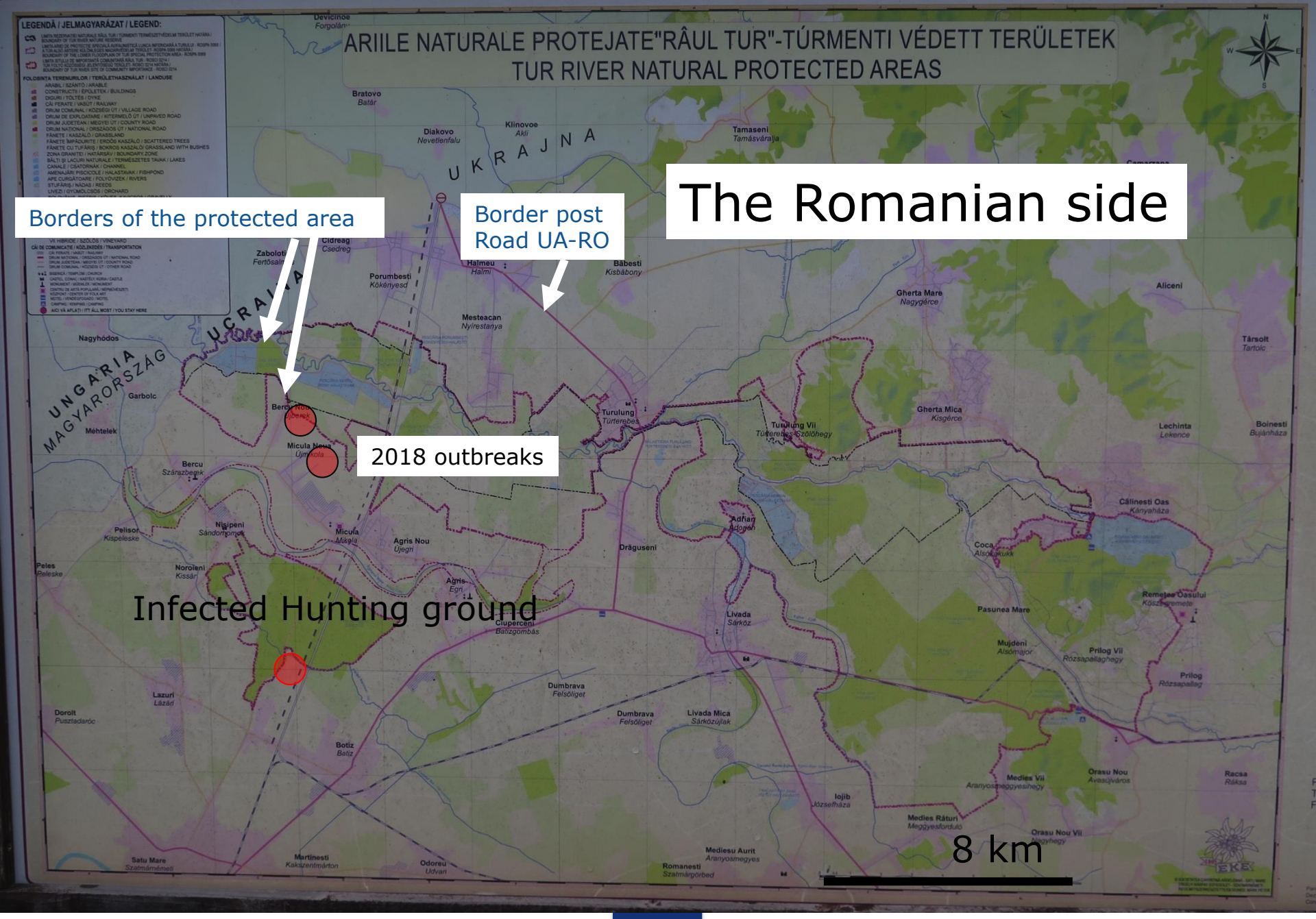
The constant patrolling of Border Police

The river is the connecting point among UA, HU, RO,
The lanscape is dominated by wetlans, forests and natural grassland




UA
RO


HU
RO
UA


ARIILE NATURALE PROTEJATE"RÂUL TUR"-TÚRMENTI VÉDETT TERÜLETEK
TUR RIVER NATURAL PROTECTED AREAS
LEGENDĂ / JELMAGYARÁZAT / LEGEND:
Borders of the protected area
Border post
Road UA-RO
The Romanian side
2018 outbreaks
Infected Hunting ground
8 km
UKRAJNA
UCRAINA
UNGARIA
MAGYARORSZÁG
Devicinoe
Forgolán
Bratovo
Batár
Diakovo
Nevetlenfalu
Klinovoe
Akli
Tamaseni
Tamásváralja
Halmeu
Halmi
Babesti
Kisbábony
Porumbesti
Kökényesd
Mesteacan
Nyirestanya
Gherta Mare
Nagygérce
Aliceni
Nagyhodos
Garbolc
Méhtelek
Turulung
Türterebes
Turulung Vii
Türterebes-Szőlőhegy
Gherta Mica
Kisgérce
Lechinta
Lekence
Boinesti
Bujánháza
Társolt
Tartolc
Bercu
Szárazbegek
Micula Noua
Újmikola
Micula
Mikola
Agris Nou
Újegri
Agris
Egri
Pelisor
Kispeleske
Nisipeni
Sándornomok
Peles
Peleske
Noroieni
Kissár
Drăguseni
Adrian
Adorján
Coca
Alsókakuk
Călinesti Oas
Kányaháza
Remetea Oasului
Köszörémete
Pasunea Mare
Livada
Sárköz
Cluperceni
Balizgombás
Mujdeni
Alsómajor
Prilog Vii
Rózsapallaghegy
Prilog
Rózsapallag
Lazuri
Lázári
Dorolt
Pusztadaróc
Dumbrava
Felsőliget
Livada Mica
Sárközülak
Botiz
Batiz
Iojib
Józsefháza
Medies Vii
Aranyosmeggyesihegy
Medies Rături
Meggyesfordulo
Orasu Nou
Avasújváros
Orasu Nou Vii
Racsa
Ráksa
Satu Mare
Szatmárnémeti
Martinesti
Kakszentmárton
Odoreu
Udvari
Romanesti
Szatmárgörbed
Mediesu Aurit
Aranyosmegyes


ACCES INTERZIS
PESTĂ PORCINĂ
AFRICANĂ

- The virus could be present – undetected – in the local wild boar population during the past months in the natural area;

- The virus in wild boar has been detected now, since it has moved south, reaching managed hunting grounds (ASF moves in wild boar aprox. 2,5 km/month)

- In any case, the detection in Wild boar results in an increased environmental load of the virus and thus in an increased risk for the domestic pig population;

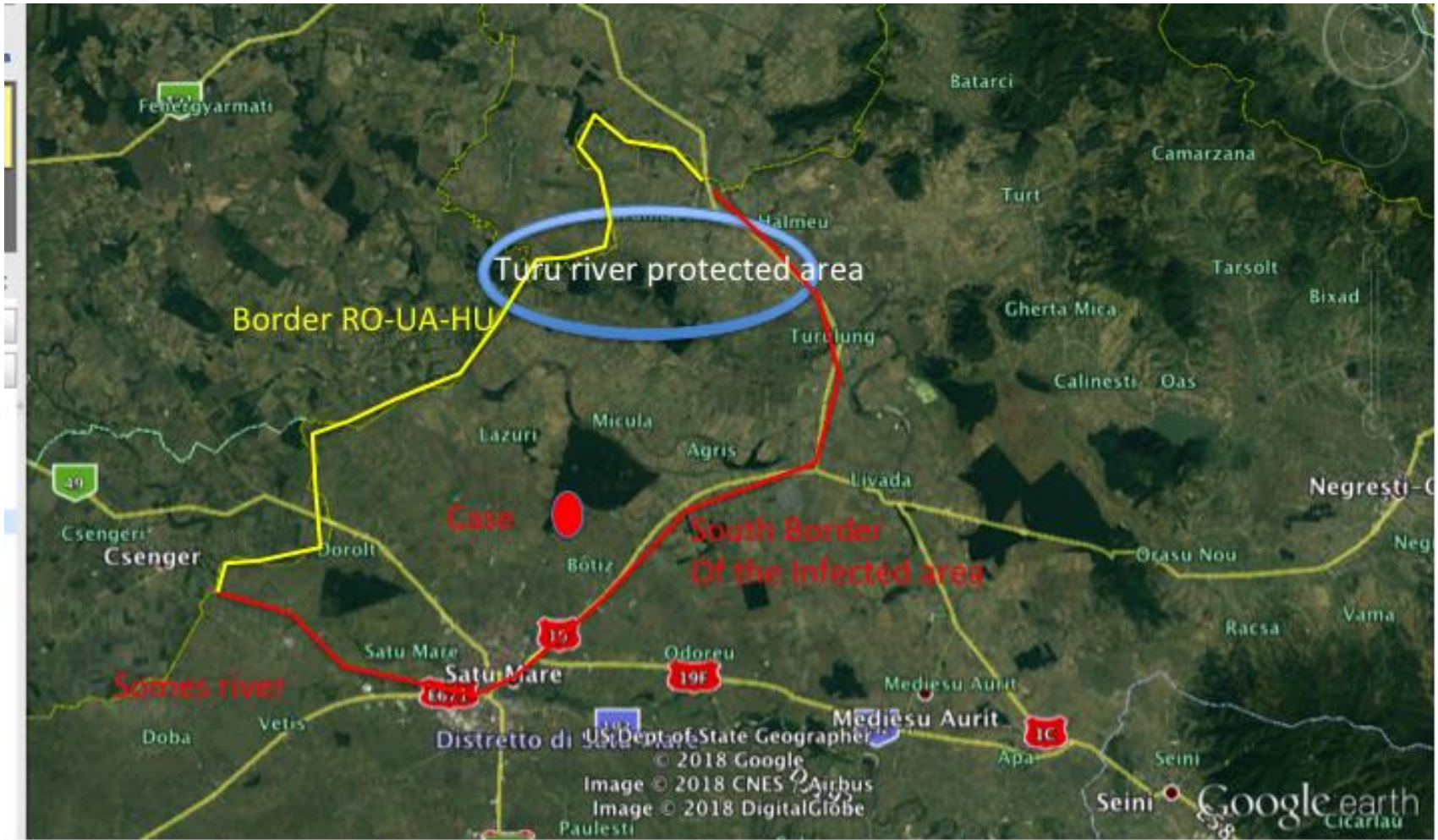
Conclusion

The area, that likely includes HU and UA, due the habitat characteristics (very dense vegetation, swamps, reeds etc.) makes the early detection of the virus rather difficult; the local detection of ASF could be slightly delayed until the virus reaches more anthropic areas and where passive surveillance reveals its presence or in domestic pigs or in wild boars;

Worth to underline the continuity with the Szatmar-Bereg protected area in Hungary

RECCOMANDATION

To carry out an immediate ASF addressed management of the wild sub-boar population in the above, defined area



Recommendations: hunting strategy

The HUNTING strategy needs to be tailored on the geographical distribution of the virus.

The geographical distribution of the virus can be defined by passive surveillance only.

Recommendations: hunting

At present hunting and feeding of any game species should be forbidden

Based on the data obtained by passive surveillance (expected timing end of August) three zone should be identified:

1. CORE ZONE: shaped connecting the points where infected wild boar carcasses will be detected (end of August);
2. BUFFER ZONE: around the core zone a further buffer of at least 5 km has to be created; it is envisaged to have a Core + buffer zones of no less than 250 Km^2;
3. LEFT ZONE: representing the zone under restriction outside the core + buffer zones;

Recommendations: passive surveillance

- The identified wild boar population inhabits 5 hunting grounds (278 km^2; 93 estimated wild boars); probably the number of wild boar is highly underestimate;

- In this wild boar population **passive surveillance** has to be permanently enforced; each found dead wild boar has to be reported to the local Veterinary Service;

Recommendations: passive surveillance

Passive surveillance has to be enforced also outside the geographical area inhabited by the ASF infected wild boar sub-population, and in particular in any forest area SOUTH to the road N. 19, EAST to the road E 81 and ALONG Somes river in the direction of the town of Satu Mare;

19 hunting grounds surrounding the 5 “directly involved” ones should be included;

Due to the possible epidemiological link with the Hungarian ASF situation, passive surveillance has to be enforced in an harmonised way between the two countries

Recommendations: passive surveillance

- Involved hunters must be informed about procedures to reduce the possible further spread of the virus in the environment and outside the infected area;
- Carcasses secured in plastic bags and transported to the nearest road and then to the render plant by authorized vehicles;
- Samples should be taken at the rendering plant by an authorized veterinarian;

Recommendations

Domestic pigs in the restricted area

The whole epidemiological situation is complicated by the presence of a huge back yard sector with more than 1000 holdings and 5000 pigs

1. Census of holdings and pigs in the restricted area;

2. Passive surveillance implemented: each dead pig (adult, post weaned) tested irrespectively of the of the mortality causes;

2. Biosecurity measures implemented in the domestic pig farms have to be reinforced and verified regularly directly by the Competent Veterinary Authorities;

Recommendations Hunting in neighbouring free areas

Once passive surveillance has defined the geographical distribution of the virus

1. Intensive wild boar hunting has to be facilitated and implemented;

2. Any type of hunting (single hunting, driven hunting, night hunting etc.) could be authorised;

- The goal is to **reduce as much as possible** the size and the density of the wild boar population
- **Adult female class** should be primarily targeted.

Recommendations

AWARENESS

- **Hunters:** dead wild boar reporting
- **Farmers:** suspect cases reporting
- **General public:** dead wild boar, presence of the virus in the forest and in recreational areas
- **Private veterinarians:** biosecurity, case definition, reporting
- **Official veterinarians:** different team for wild boar and domestic pigs in case of outbreaks

Final considerations

Up to now **any** proposed strategy could be jeopardized due to the absence of strict legal bases for hunting ban, safe disposal of wild boar carcasses, rendering, targeted hunting and developing biosecurity measures in hunting grounds;

Thank you for your attention!

The CVET team wish to thank all colleagues from Romania for their support and help given.

The working atmosphere during the mission was very good.

The colleagues from Romania gave all their support and assistance to facilitate a fruitful mission.