



Available tools for the prevention and control of diseases in wildlife, with focus on ASF in wild boar in infected country: hunting biosecurity and wild boar carcass disposal

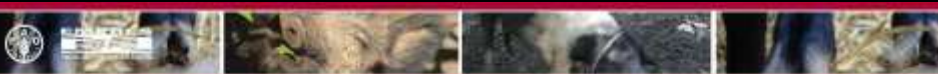
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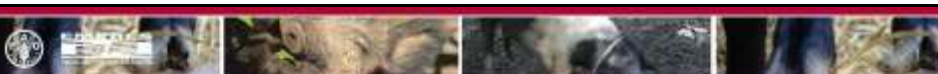
Risk of spread after introduction of the virus in to wild boar population

- Delayed diagnosis;
- Wild boar population size and density;
- Forest connectivity;
- Inappropriate hunting methodologies;
- Lack of biosecurity measures applied during hunting;
- Infected wild boar carcasses available for healthy wild boars;
- Poaching...



The challenge for a country

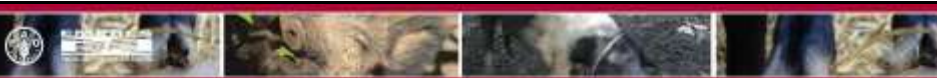
- Provide trainings for hunters;
- Explain the epidemiological role played by wild boars;
- Explain the major risk linked with hunting activities;
- **Unfortunately:** explain that they have no advantages in declaring the presence of the infection in their hunting grounds.



Role of hunters dealing with ASF suspicion

Each hunter in the area at risk must be well trained:

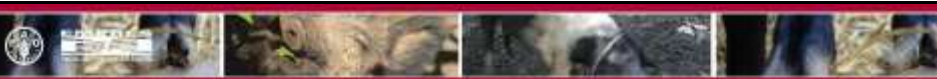
- to recognize clinical symptoms of ASF in wild boar (even hunted)...
- to know what kind of samples to take;
- how to take samples;
- to notify the suspicion (to whom, when?);
- disposal of carcass (how?);
- basic biosecurity requirements;
- hunting hygiene.



The challenge for a country

The procedures should be in place on:

- how to take samples;
- how to / where to keep the (entire) carcass in a fridge before lab results are available (could be 2-3 days, could be much more...)
- how to keep the hunted wild boar - carcass with / without the skin and organs separately;
- how to dispose of offal's;
- how to dispose of entire carcass in a positive case;
- how to dispose the found dead wild boar;
- cleaning and disinfection procedures.



Expert groups

- maintain the expertise needed to assist the competent authority in ensuring disease preparedness;
- shall assist the competent authority at least in:
 - (a) the epidemiological enquiry;
 - (b) sampling, testing and interpretation of results of laboratory tests;
 - (c) establishment of disease control measures.





Expert group assistance in a case of ASF in wild boars



- studying the epidemiological situation and defining an infected area,
- establishing appropriate measures to be applied in the infected area; these measures may include suspension of hunting and a ban in feeding wild animals,
- drawing up the eradication plan,
- carrying out checks to verify the effectiveness of the measures adopted to eradicate African swine fever from the infected area.



Surveillance in the infected area

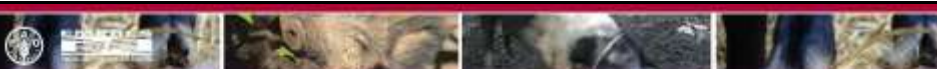
- Due to the characteristics of the disease, obvious clinical signs and high fatality rate, passive surveillance based on investigation of wild boar found sick or dead plays a pivotal role in the early detection of ASF!
- In addition, given that a certain proportion of wild boar may also survive the infection, active surveillance of shot animals may also provide very valuable data on the evolution of the disease and guidance on the assessment of the effectiveness of the disease control measures adopted in the area.



Surveillance in the infected area

- ❖ The size of the target population to be sampled should be previously defined in order to establish the number of samples to be taken.
- ❖ Sample size must be established as a function of the estimated number of living animals and not as a function of the number of animals shot.
- ❖ If data on population distribution, density and size are not available, the geographical area in which the sampling to be carried out must be identified taking into account the continuous presence of wild boars and the presence of natural or artificial barriers that will efficiently prevent large and continuous movement of the animals.
- ❖ It is recommended to identify sampling geographical units of about 200 km², with a wild boar population of about 400 to 1000 heads.
- ❖ The minimum number of wild boar to be sampled within each defined sampling unit must allow for the detection of 5 % prevalence with 95 % confidence. For this purpose at least 56 animals must be sampled in each unit within a hunting season.

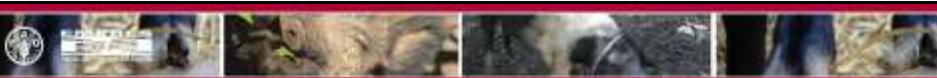
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ASF Strategy for Eastern Part of the EU

- Minimum biosecurity requirements for the hunters should be foreseen by the competent authority; at least these aspects should be included:
 - dedicated authorised dressing facility should be available in each hunting ground;
 - inside each hunting ground a facility/premise should be equipped with refrigerator;
 - hunted wild boar should remain in the premises of the hunting ground until tested;

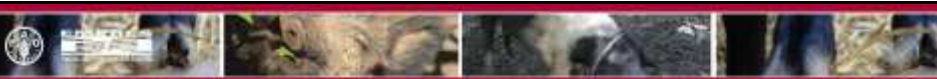
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ASF Strategy for Eastern Part of the EU

- Offal from hunted wild boar should not be removed from the animal in the field; shot wild boar should be brought to dedicated authorised dressing facilities limiting loss of body fluids (including blood).
- After dressing the wild boar, the place and equipment used (including transport vehicles) should be washed and disinfected with authorized disinfectants.
- Animal by products should be collected and processed in accordance with Regulation (EC) No 1069/2009.

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Biosecurity

Definition:

“The implementation of measures that reduce the risk of the introduction and spread of disease agents;

it requires the adoption of a set of attitudes and behaviors by people to reduce risk in all activities involving domestic, captive/exotic and wild animals and their products” ...

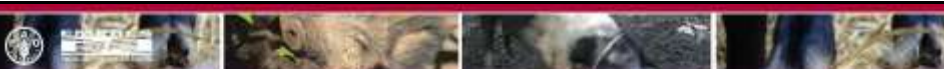


BIOSECURITY... AND WHY?...

When dealing with ASF in wild boar the main task is to **REDUCE the virus load in the environment (!)**

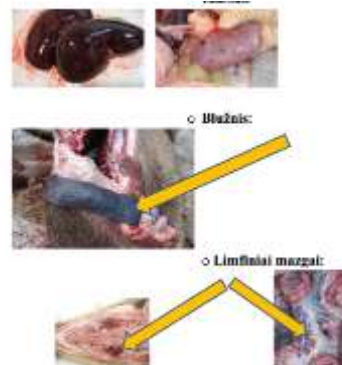
It means to reduce as much as possible the presence of the virus and thus reducing the probabilities of further spread in both wild boar and in domestic pigs.

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Surveillance

Places at specified high risk for the introduction and spread of ASF, such as those where wild boars are gathered by the hunters and inspected, should be kept under strict supervision of veterinarians and personnel well-trained in recognizing the signs and lesions caused by the disease and on the measures to be adopted to avoid its spread.



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INFECTED DEAD = INFECTED HUNTED WILD BOAR ?

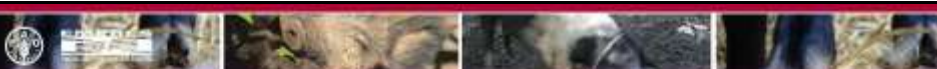
Usually hunted wild boars are transported with **the hunter's own car** to the hunting lodge; the probability of virus contamination of cars, hunting equipment is increased;

Hunted wild boars – if infected – will contaminate the dressing area of the hunting house; if not dressed in the hunting house, infected offal remain in the forest: failure in reducing the environmental contamination of the virus;

Shot infected wild boars are stored in the hunting lodge that, in some part, it is likely to be contaminated by the virus;

Hunting lodges are visited by many persons, some of them could not be fully aware of the possible environmental contamination...;

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TRANSPORT OF SHOT ANIMALS

TRANSPORT OF HUNTED ANIMALS TO THE DRESSING FACILITY IS CARRIED OUT USING DEDICATED VEHICLES. PRIVATE CARS SHALL BE PARKED OUTSIDE THE HUNTING HOUSE, POSSIBLY ON THE MAIN ROAD

Difficult to ask and thus to achieve...

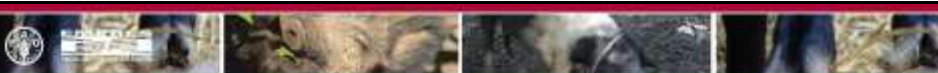
Cars could be highly involved in spreading indirectly the ASF virus..

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Dressing area

- To be used in order to minimize the risk of ASF viral contamination of the environment;
- Open air or closed facilities;
- Designated exclusively for animal dressing;
- Authorized by Competent Authority, recognized by hunters and ensure the basic biosecurity...
- Equipment used for dressing should not be used in any other places or moved to the animal keeping places;
- Authorized disinfectants should be used.



GENERAL RULE

Hunted wild boar should never leave the hunting area unless tested for ASF and the carcasses released only when resulted negative to ASF.



HUNTED WILD BOAR

- ✓ All hunted wild boars within infected area are subject to **laboratory tests** for ASF by ELISA and PCR;
- ✓ It should be forbidden to use the meat of hunted wild boars and to move the meat from the hunting place within the infected area **before the results of ASF testing** have been obtained from the laboratory;
- ✓ Till the laboratory results of ASF testing are obtained, **the carcasses of wild boars should be stored isolated** or in places authorised by CA.



Biosafety

Hunters should **process hunted wild boars** in special designated places and all ABPs should not be moved outside but kept in special tightly closed animal waste pits or containers.

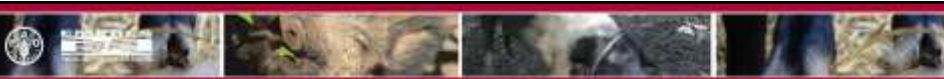


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Ground pits for offal disposal should be at least 3 meter deep, fenced and closed with a locked closure. Pits should be located in close proximity to the dressing room.

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Disposal of carcasses

Carcasses of all domestic and wild boars found dead in the infected areas shall be processed under official supervision and tested! Carcasses should be collected and processed - by burning, burial or disposal in the rendering plant.





Role of hunters dealing with ASF suspicion

Dead wild boar could be found not only in the forest...



Photo: I. Koloda (Latvia)



Thank you for your attention!



<http://www.dailymail.co.uk/news/article-2076151/Family-wild-boar-tourist-attraction-face-slaughter-cull-Forest-Dean-Gloucestershire.html>

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