African swine fever in wild boars in the Czech Republic

Petr Šatrán, Brussels 25. 10. 2017
First occurrence of ASF virus in wild board in the Czech Republic


Location of finding: Příluky u Zlína, GPS 49°13′44.303″N, 17°42′1.996″E
Current epidemiological situation (23. 10. 2017)

First case of ASF - date of carcase finding: 21.6.2017

In total 112 cases of African swine fever in wild boar population

**No outbreak in domestic pigs**

Date of the last positive case was found: 29 September 2017

All cases in high risk area in District Zlín:

- Hvozdná 42
- Klečůvka 11
- Kostelec u Zlína 7
- Lužkovic 40
- Ostrata 1
- Příluky u Zlína 8
- Zlín 1
- Želechovice nad Dřevnicí 2

**Total** 112

Mortality rate in the high risk zone

155 found death / 112 positive for ASF

Infected area district Zlín 262 / 112
Findings of dead found wild boars – daily incidence

- numbers of dead found wild boar in the District Zlín (in total 262)
- numbers of ASF positive wild boars (in total 112)
Findings of dead wild boars – cumulative incidence

- numbers of dead found wild boars in the District Zlín (in total 262)
- numbers of ASF positive wild boars (in total 112)
Findings of dead wild boars - weekly incidence

numbers of dead found wild boars in the District Zlín (in total 262)
numbers of ASF positive wild boars (in total 112)
Distribution of positive findings in months

June 2017

July 2017

August 2017

September 2017
High and low risk zone for hunting rules
Hunted wild boars in infected area – 23th October

The total number 1005

All hunted wild boars are tested for ASF (virologically and serologically) in the NRL. Only 1 case of wild boar caught in trapping facility in hunting area Lužkovice was positive.

Tested 972

High risk - hunting 78 / 0
High risk - trapping 26 / 1
Low risk - hunting 868 / 0
Results of testing of hunted wild boars in area with intensive hunting to 20. 10. 2017

The total number of wild boars hunted: 5 948
All with negative result for ASF
Overview of results of virology testing of samples taken from hunted wild boars in the area with an intensive hunting (23 October 2017)

<table>
<thead>
<tr>
<th>Region</th>
<th>District</th>
<th>No of tested hunted wild boars</th>
<th>No of positive result</th>
<th>Testing is not possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region Vysocina</td>
<td>Pelhřimov</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Brno-město</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Brno-venkov</td>
<td>42</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Břeclav</td>
<td>221</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Hodonín</td>
<td>818</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Vyškov</td>
<td>392</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>Znojmo</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>Olomouc</td>
<td>63</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>Prostějov</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>Přerov</td>
<td>355</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>Šumperk</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>Kroměříž</td>
<td>1126</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Zlín</td>
<td>Uherské Hradiště</td>
<td>1196</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Region Zlín</td>
<td>Vsetín</td>
<td>847</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Moravian-Silesian Region</td>
<td>Frýdek-Místeck</td>
<td>537</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Moravian-Silesian Region</td>
<td>Karviná</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Moravian-Silesian Region</td>
<td>Nový Jičín</td>
<td>218</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Moravian-Silesian Region</td>
<td>Ostrava-město</td>
<td>44</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Not specified</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In total</strong></td>
<td></td>
<td><strong>5948</strong></td>
<td><strong>0</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
### CZ Results of the monitoring of dead wild boars from 1 January to 23 October 2017

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of tested animals</th>
<th>Number of positive animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prague, the Capital</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Central Bohemian Region</td>
<td>81</td>
<td>0</td>
</tr>
<tr>
<td>South Bohemian Region</td>
<td>77</td>
<td>0</td>
</tr>
<tr>
<td>Region Pilsen</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>Region Karlovy Vary</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>Region Ústí nad Labem</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>Region Liberec</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>Region Hradec Králové</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Region Pardubice</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Region Vysočina</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>South Moravian Region</td>
<td>122</td>
<td>0</td>
</tr>
<tr>
<td>Region Olomouc</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Region Zlín</td>
<td>258</td>
<td>112</td>
</tr>
<tr>
<td>Moravian-Silesian Region</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>In total</td>
<td>1106</td>
<td>112</td>
</tr>
</tbody>
</table>
17. – 19. 10. 2017

The situation has been evaluated on the spot by GF TAD mission with experts from

IT, EE, LV, RF, DE
PLAN OF THE ERADICATION OF AFRICAN SWINE FEVER IN THE POPULATION OF WILD BOARS
Aims of the eradication plan according CD 2002/60/EC

- To prevent spreading of disease in wild boars population;
- To prevent introduction of disease to domestic pigs holding;
- To reduce the wild boars population;
- Eradication of African swine fever (ASF) in wild boars population in the infected area
ASF virus in wild board in the Czech Republic


Location of finding: Příluky u Zlína, GPS 49°13′44.303″N, 17°42′1.996″E
Demarcation of the infected area

In accordance with the Council Directive 2002/60/EC the whole District Zlín has been declared as an infected area (1 034 km²), 37 municipalities, 89 hunting grounds.
Density of domestic pigs in the Czech Republic (per 100 km²)

CZ  
2,160 farms, 1,353,935 pigs

Region of Zlín  
83 farms, 74,088 pigs

Infected area (District Zlín)  
23 farms, 16,301 pigs
Hunting density of wild boars in the hunting year 2015 (per 100 km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>number of hunted WB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>144 305</td>
</tr>
<tr>
<td>2011</td>
<td>109 563</td>
</tr>
<tr>
<td>2012</td>
<td>185 381</td>
</tr>
<tr>
<td>2013</td>
<td>152 468</td>
</tr>
<tr>
<td>2014</td>
<td>169 483</td>
</tr>
<tr>
<td>2015</td>
<td>186 148</td>
</tr>
<tr>
<td>2016</td>
<td>160 164</td>
</tr>
</tbody>
</table>
Modelled wild boar population density in Europe
(source: FAO/ASFORCE, May 2015)
Veterinary measures have been taken in accordance with the Council Directive 2002/60/EC:

— **Infected area has been defined**

— Veterinary measures have been established, including **ban of hunting and a ban on feeding** wild boars

— Investigation of the epidemiological situation is carried out in the whole defined infected area

— The official list of all categories of domestic pigs in all holdings was ordered

— The area with **intensive hunting** has been determined around the infected area
Measures in Wild boar population in 4 levels

- **Czech Republic** = 78,886 km²
- **Intensive hunting area** - 8,500 km² (No district Zlín)
- **District Zlín** – 1033 km²
  - Infected area with low risk - 1033 – 159 = 874 km²
  - Infected area with high risk: 158,96 km²
  - Infected area with the highest risk (behind fences): 57,18 km²

*Map showing zones with high and low risk, intensive hunting area, and rest of the Czech Republic.*
Measures taken

1. Measures in the infected area in domestic pigs
2. Measures in the infected area in wild boars
   - in the high-risk zone
   - in the low-risk zone
3. Measures in the area with intensive hunting
4. Measures on the whole territory of the Czech Republic
Measures in the infected area in domestic pigs

1. Official checks in domestic pig farms
2. Monitoring of all sick or dead pigs
3. A list of pig farms in the infected area including backyards farms
4. Movement control
5. Ban of feeding with fresh grass
6. Ban of straw using
7. Measures of biosecurity in backyard farm (pigs for home slaughter)
Measures taken in the infected area after ASF confirmation

1. Passive surveillance in dead wild boars
2. Payment is 1000 CZK (40 EUR) for one dead found wild boar
3. Ban of hunting
4. Ban of feeding
5. Ban on feeding of wild boars, only baiting can be performed with not more feeding than 10 kg / month / 1 km², it is not applicable for hunting using trapping facilities;
6. Smell and electric fences around the high-risk zone
7. The ban on public entering to the high-risk zone
8. Unharvested crop as a shelter for wild bar in selected areas (maize, rape, cron)
Smell fence installed around the high-risk zone
Electric fence installed around the high-risk zone

http://www.africkymorprasat.cz
Electric fence installed around the high-risk zone
Map of the high-risk zone with the location of the smell fences and electric fences
Setting up high and low risk zone in the framework of infected zone in relation to wild boar hunting

Hunting

Home range – 100% one year
High and low risk zone for hunting rules
Measures in the infected area in the high-risk zone in wild boars

— RED zone - area around the outbreak has been set as “off-limit area”. (18 hunting areas – 16 000 hectares). Wild boar individual hunting activities have been banned till 11. 9. 2017.

— Trapping of wild boars has been alovend since 24. 8. 2017.

— Public is not allowed to enter this area apart from farmers, hunters and police.

— All collective hunts (even for other hoofed game) have been banned.

— Motivation for finding dead wild boar is 4 000 CZK / 160 €.
Measures in the infected area in the high-risk zone in wild boars

— hunting of wild boar is allowed only for selected and trained hunters, motivated by financial compensation (4 000 CZK/ 160 € each hunted wild boar). The same compensation is for trapping.

— all hunted and found death wild boar must be disposed in the rendering plant.

— Hunters association is compensated for the loss of venison (piglet 37 EUR, one-year old 74 EUR, adult saw 120 EUR).
Trapping of wild boar

Trapping (plan to use 29 in high risk zone)
Measures in the infected area in the low-risk zone in wild boars (green zone)

— hunting of wild boar is allowed since 21. 7. and motivated by financial reward (3 000 CZK / 120 € each hunted wild boar) - all shot and found wild boar must be disposed in the rendering plant.

— compensation for the loss of venison (piglet 37 EUR, one-year old 74 EUR, adult saw 120 EUR) is paid to hunters association.

— All collective hunts (even for other hoofed game) are banned.

— Motivation fee for finding of dead wild boar is 3 000 CZK / 120 €.

— Some prohibited methods of hunting have been allowed - hunting all age classes, and both sexes, hunting from cars and other vehicles, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.
Hunted wild boars in infected area – 23th October

The total number  **1005**

All hunted wild boars are tested for ASF (virologically and serologically) in the NRL. Only 1 case of wild boar caught in trapping facility in hunting area Lužkovice was positive.

Tested 972

High risk - hunting  78 / 0
High risk - trapping  26 / 1
Low risk - hunting  868 / 0
Disposal of hunted wild boars from infected area in rendering plant
Measures in the area with intensive hunting

1. Buffer zone – area of intensive hunting surrounding the infected area, hunters are motivated by 1 000 CZK (40 €) for each shot wild boar.
2. The shot wild boar can be used for consumption.
3. Some prohibited methods of hunting have been allowed - hunting all age classes, and both sexes, hunting from cars and other vehicles, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.
4. Motivation for finding of dead wild boar is 1 000 CZK / 40 €
Measures on the whole territory of the Czech Republic

1. **Information for public, pig farmers, hunters, veterinarians** etc.
   - Official letters
   - Daily SVA web site updates
   - Biosecurity guide for farmers
   - List of disinfectants
   - Guide for dead WB finding

2. **Established an expert group (NDCC)** including veterinarians, hunters, wildlife biologists and epidemiologists with expert from the CVET participation
   - Clarifying of the situation
   - Request for data for the preparation of the eradication plan
   - Studying the epidemiological situation and implementation of the measures

3. Ban of feeding of domestic pigs with kitchen and catering waste was emphasized

4. **A surveillance programme and preventive measures have been applied at holdings with domestic pigs.** Sick or dead pigs, for which ASF cannot be excluded on clinical grounds, have been tested for ASF in accordance with the provisions set up in the Diagnostic Manual

5. **The passive surveillance of dead found wild boars continues**
Hunting in the rest areas of the Czech Republic

— Hunting is also intensified.

— Some prohibited methods of hunting have been allowed - hunting all age classes, and both sexes, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.

— Motivation for finding dead wild boar is 1 000 CZK (40 €).
## Collection of death wild boar – paid to hunters

<table>
<thead>
<tr>
<th></th>
<th>CZ</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Infected zone – low risk (green)</td>
<td>1 000,00 CZK / 40 €</td>
<td></td>
</tr>
<tr>
<td>Infected zone – high risk (red)</td>
<td>3 000 CZK / 120 €</td>
<td>4 000 CZK / 160 €</td>
</tr>
</tbody>
</table>
Timeline of hunting regulation

- **26.6.2017**
  - ASF confirmation

- **27.6.2017**
  - Infected area

- **27.6.2017**
  - Ban of hunting in infected area

- **13.7.2017**
  - Veterinary measure – hunting intensification in CZ

- **13.7.2017**
  - Veterinary measure – setting buffer zone with intensive hunting

- **18.7.2017**
  - Setting up high and low risk zone in the infected area

- **21.7.2017**
  - Hunting in the low risk zone in infected area

- **24.8.2017**
  - Trapping of wild boar in the high risk zone in infected area

- **11.9.2017**
  - Individual hunting in the high risk zone in infected area
Thank you