

(peaking in December) and then a secondary peak in May – June. This is often out of synch with the peak in outbreaks seen for the backyard domestic pig sector which occurs June to November (FAO, 2013). This is probably reflective of different breeding cycles and the timing when contact is likely between wild boar and domestic pigs.

Russia has recently sent to the OIE a “final report” for ASF (OIE, 2013); it could be suggested that rather than signifying the disease outbreaks have been resolved, that reporting will move to six monthly reports or exceptional cases, when disease appears in a new region or causes a significant increase in cases.

A Russian review article highlighted the difficulty with controlling ASF where virus circulates in wild boar and when control measures are ineffective or there is no incentive to put them in place (Gogin et al., 2013). As long as this is the case, incursions into neighbouring countries will continue. The emphasis then lies with owners and keepers of domestic pigs to retain tight biosecurity and promptly report suspicion of disease.

Three recent articles have looked closely at the risk of introduction and spread of ASF into EU Member States through illegal trade in infected pig meat, transport associated routes or movement of wild boar (Costard et al. 2013; Mur, et al. 2013; De la Torre et al. 2013). Costard and colleagues used a semi-quantitative method to assess the factors (through expert opinion) influencing smuggling illegal meat and the exposure of the pig population, based on low and high on farm biosecurity. On a relative risk scale, the UK, France, Germany and Italy were a high risk for introduction of disease through illegal imports (according to the high number of ports, airports and travellers to or from affected countries), but for exposure (and based on the number of pig farms with low biosecurity, or likely contact with wild boar or high number of foreign pig farm workers), France, Italy, Poland Romania and Spain were also high risk of exposure (UK was moderate risk). These risk levels do not take into account the border checks we carry out in the UK to mitigate this risk, and the proxy indicator for low biosecurity pig farms was based on size as the definition, therefore this could be an overestimate, but it still highlights the risks. In terms of transport routes, Mur and colleagues looked at the risk of introducing ASF virus as fomites from returning trucks and international catering waste from ships and planes. Again, relative weighting of risk factors (by expert elicitation) suggested that although most transport routes are a low risk, some countries are at a higher risk than others from specifically returning trucks (Poland and Lithuania). De la Torre and colleagues, used the same approach to tackle the issue of wild boar movements and concluded that in the EU MSs closest to the ASF affected regions, (Finland, Latvia, Poland and Romania) were at the highest risk of introduction into their own wild boar populations through either wild boar movement or contact with infected domestic pigs.

3. Conclusions

Live pigs and pig products from Ukraine are not approved for import into the European Union. Wild boar are not robustly territorial animals; sounders (herds) of females and young will have small ranges unless disturbed by hunters, but mature males are solitary and have a wide territory, travelling distances of many (as much as 60) kms in a single night. Therefore this individual case on the border with an infected region may not indicate significant spread of disease around the localised region, if there is low pig population density, but wild boar movements can still contribute to disease introduction and spread.

As we have previously stated, countries and regions where certain risk factors, such as a high proportion of backyard pig farms, wild boar contact, suitable vector (Argasid tick) populations or practicing swill feeding are at greater risk than those EU MSs with mainly high biosecurity commercial pig farms (such as the UK). The quantification of illegal trade is a difficult process and we therefore consider there is a constant low risk of introduction of various exotic animal diseases into an uninfected area through the illegal trade of infected meat or contaminated products / fomites; this list of diseases includes ASF.

Therefore the introduction and spread of ASF is a threat to the whole of the EU and it is imperative that control measures are applied effectively and regular exchange of information and expertise is maintained.

We will continue to monitor the situation and report on technical and political developments as part of exchanging information with other countries and sectors.

4. Author

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5. References

- Costard S, Jones BA, Martinez-Lopez B, Mur L, de la Torre A, et al. (2013) Introduction of African Swine Fever into the European Union through Illegal Importation of Pork and Pork Products. PLoS ONE 8(4): e61104. doi:10.1371/journal.pone.0061104
- FAO (2013) EMPRES Watch: Africa Swine Fever in the Russian Federation: risk factors for Europe and beyond. <http://www.fao.org/docrep/018/aq240e/aq240e.pdf> Accessed 08/01/2014.

- De la Torre, A., Bosch, J., Iglesias, I., Munoz, M.J., Mur, L., Martinez-Lopez, B., Martinez, M., Sanchez-Vizcaino, J.M., 2013, Assessing the Risk of African Swine Fever Introduction into the European Union by Wild Boar. *Transboundary & Emerging Diseases* doi: 10.1111/tbed.12129
- Gogin A., Gerasimov, V., Malagolovkin, A. & Kolbasov, D. (2013) African Swine Fever in the North Caucasus region and the Russian Federation in years 2007-2012. *Virus Research* 173: 198-203.
- Mur, L., Martinez-Lopez, B. & Sanchez-Vizcaino, J.M. (2013) Risk of African swine fever introduction into the European Union through transport-associated routes: returning trucks and waste from international ships and planes. *BMC Veterinary Research* 2012 8:149.
- OIE (2014) African Swine Fever in Ukraine. Immediate Notification Ref OIE 14625; Report Date 08/01/2014.
http://www.oie.int/wahis_2/temp/reports/en_imm_0000014625_20140108_152042.pdf
Accessed 08/01/2014.
- OIE (2013) African Swine Fever in Russia. Follow-up Report No.110 Ref OIE 14575; Report Date 25/12/2013.
http://www.oie.int/wahis_2/temp/reports/en_fup_0000014575_20131226_150932.pdf
Accessed 08/01/2014.