Better Training for Safer Food

Initiative

How to design a "Wild boar" infected area

Vittorio Guberti

BTSF

This presentation is delivered under contract with the Consumers, Health, Agriculture and Food Executive Agency (http://ec.europa.eu/chafea). The content of this presentation is the sole responsibility of Opera S.u.r.l., the Istituto Zooprofilattico Sperimentale Lombardia e Emilia Romagna and the State Food and Veterinary Service of Latvia and it can in no way be taken to reflect the views of the Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union. The Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union will not be responsible under any circumstances for the contents of communication items prepared by the contractors.

Warsaw October 2016

First point

African swine fever cannot be managed directly:

No treatment

No vaccine

The probability to eradicate or control the infection is linked to the CORRECT MANAGEMENT the INFECTED WILD BOAR POPULATION and the HABITAT in which it lives

Outbreak management following ASF detection in wild boar

Define the infected area

Protect the domestic pig population (census and biosecurity)

Management of the infected wild boar population

Which are the risk factors that enable a wild boar population to play the role of epidemiological reservoir of the ASF virus

- Presence of the virus
- Size of the population
- Density of the population
- Size and density define the wild boar geographical distribution
- Age and gender of the infected wild boar population
- Type of hunting
- Period of the year during which the virus has been detected/introduced

Risk factors

Size and density: likelihood of virus spread and persistence (no wild boar no ASF)

Wild boar geographical distribution: where the virus can spread through the continuity of the wild boar geographical distribution (fine scale)

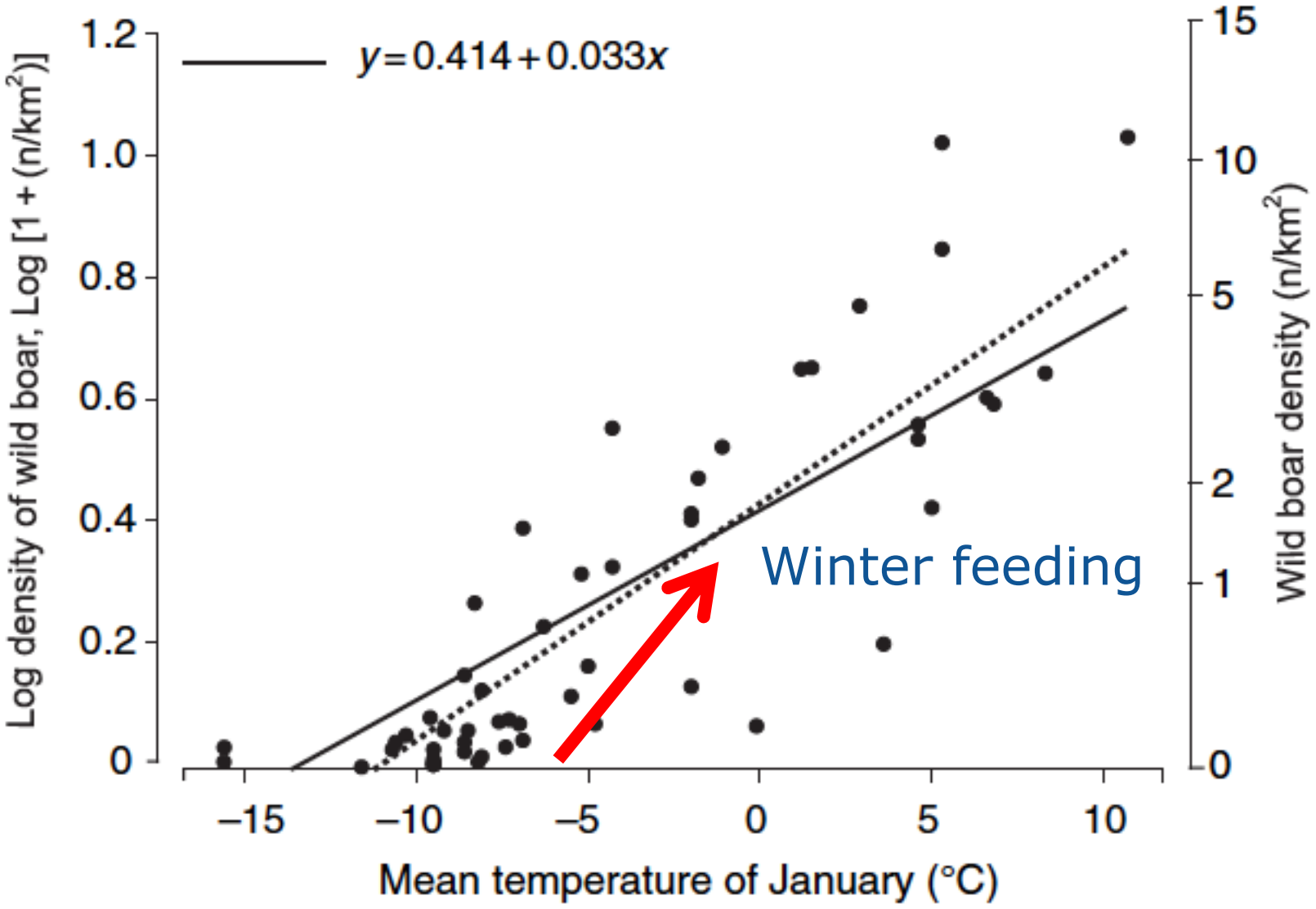
Mean age of the population: younger population are less productive

Gender unbalanced populations: more females than males; adult females are less hunted

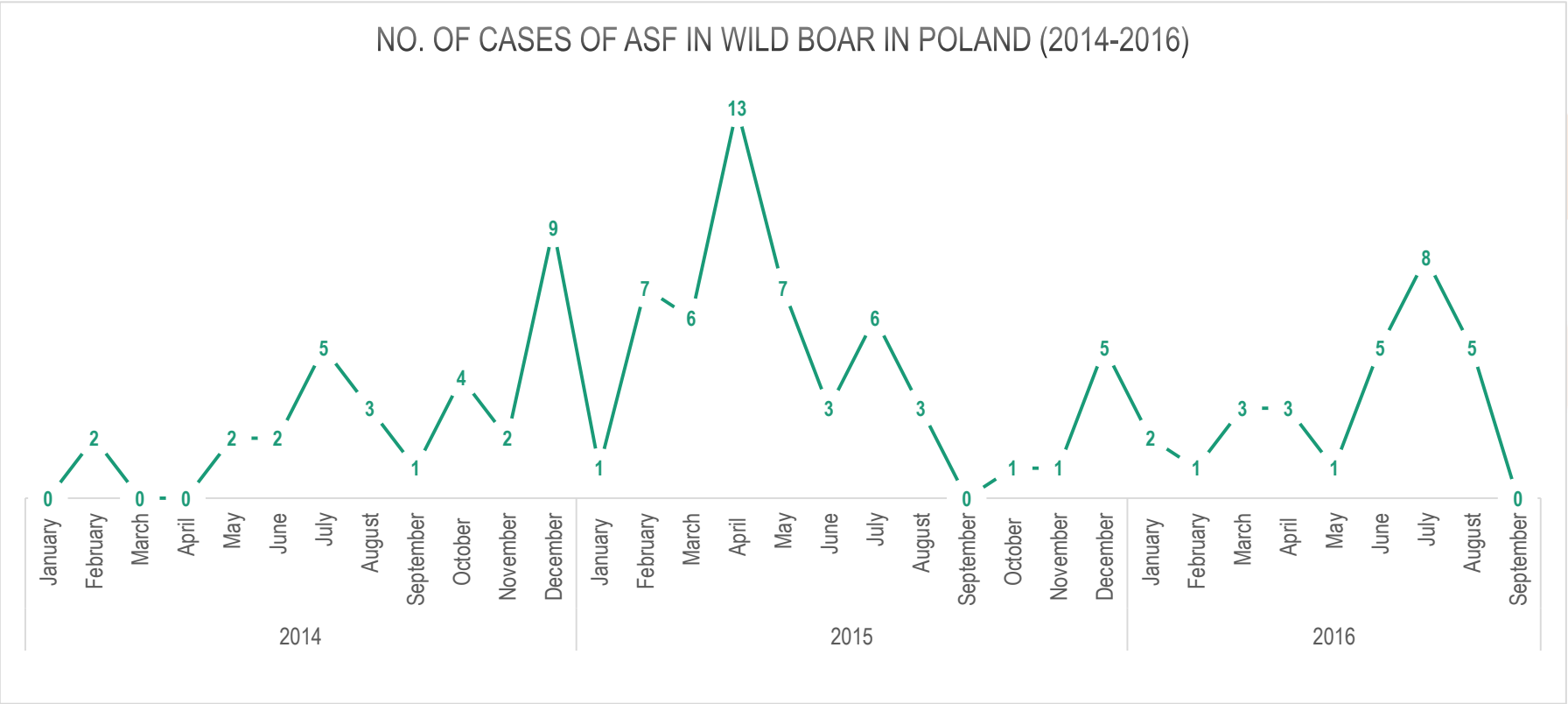
Type of hunting: target hunting less productive than driven hunts

Period of the year: ASF summer peak due to new borne recruitment in the population; rutting season (Winter)

Wild boar population size and winter temperature



ASF seasonality



Infected area: which characteristics have to be taken into account?

The historical and current geographical distribution of the infection;

Epidemiological investigations

Wid boar home range, geographical distribution

Landscape structure

Wild boar infected area

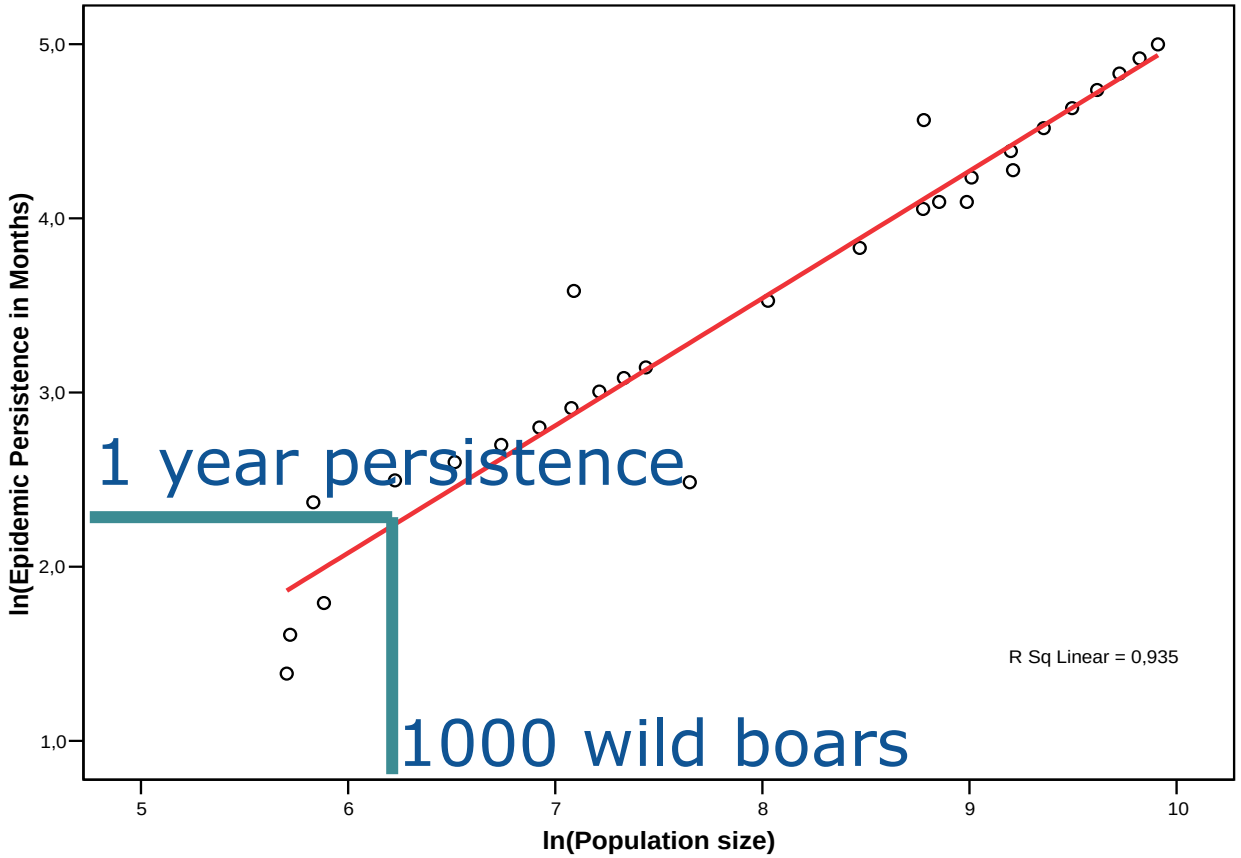
All the suitable wild boar habitat in geographical continuity

Borders defined by artificial or natural barriers

Not less than 200 km2

Easy to identify

Why 200 square km: CSF in wild boar

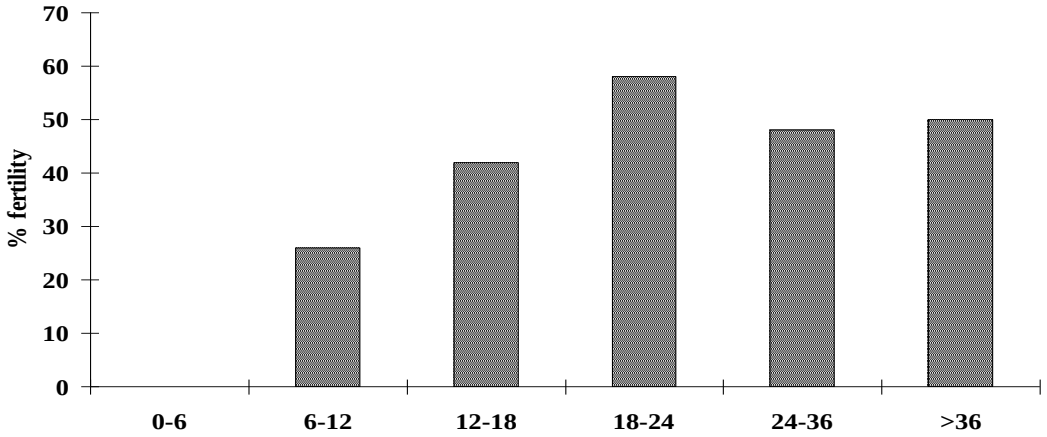


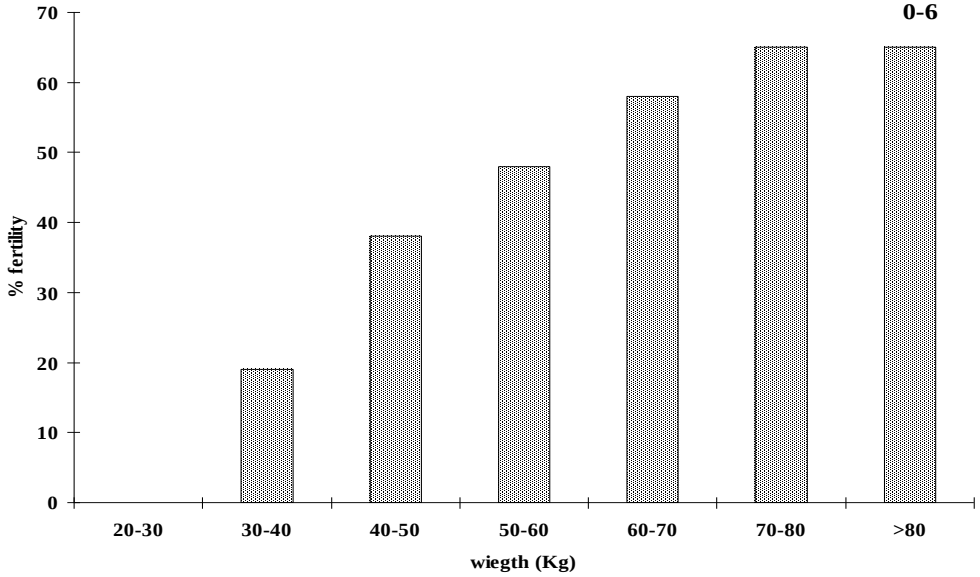
200 square km infected area does it fit for ASF?

YES

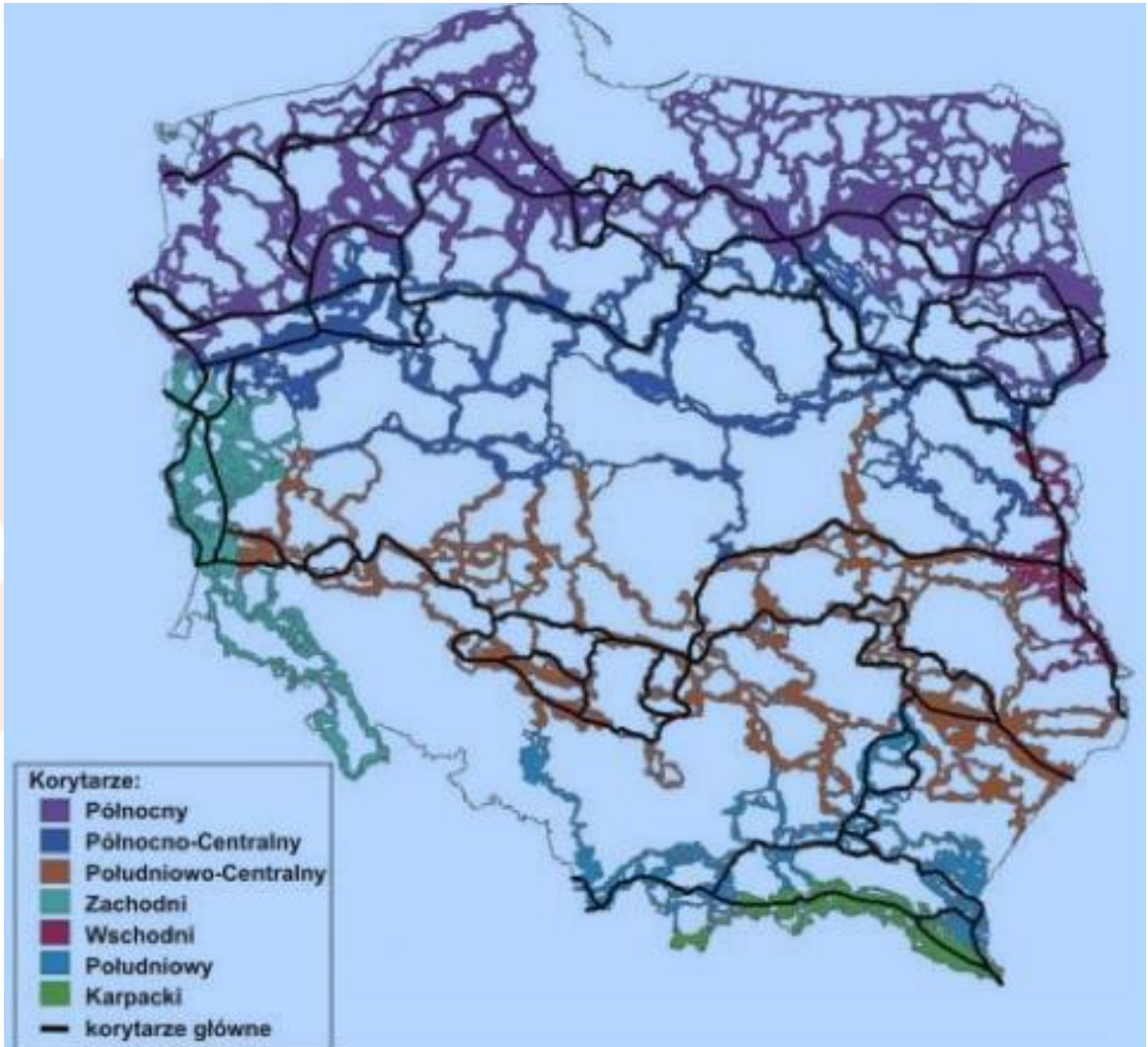
1) It is possible to see the infection after several months
2) It is a reasonable wild boar management unit
3) According to the average wild boar densities it is possible to sample with appropriate intensities
4) **It is a correct "ASF in wild boar" management unit**

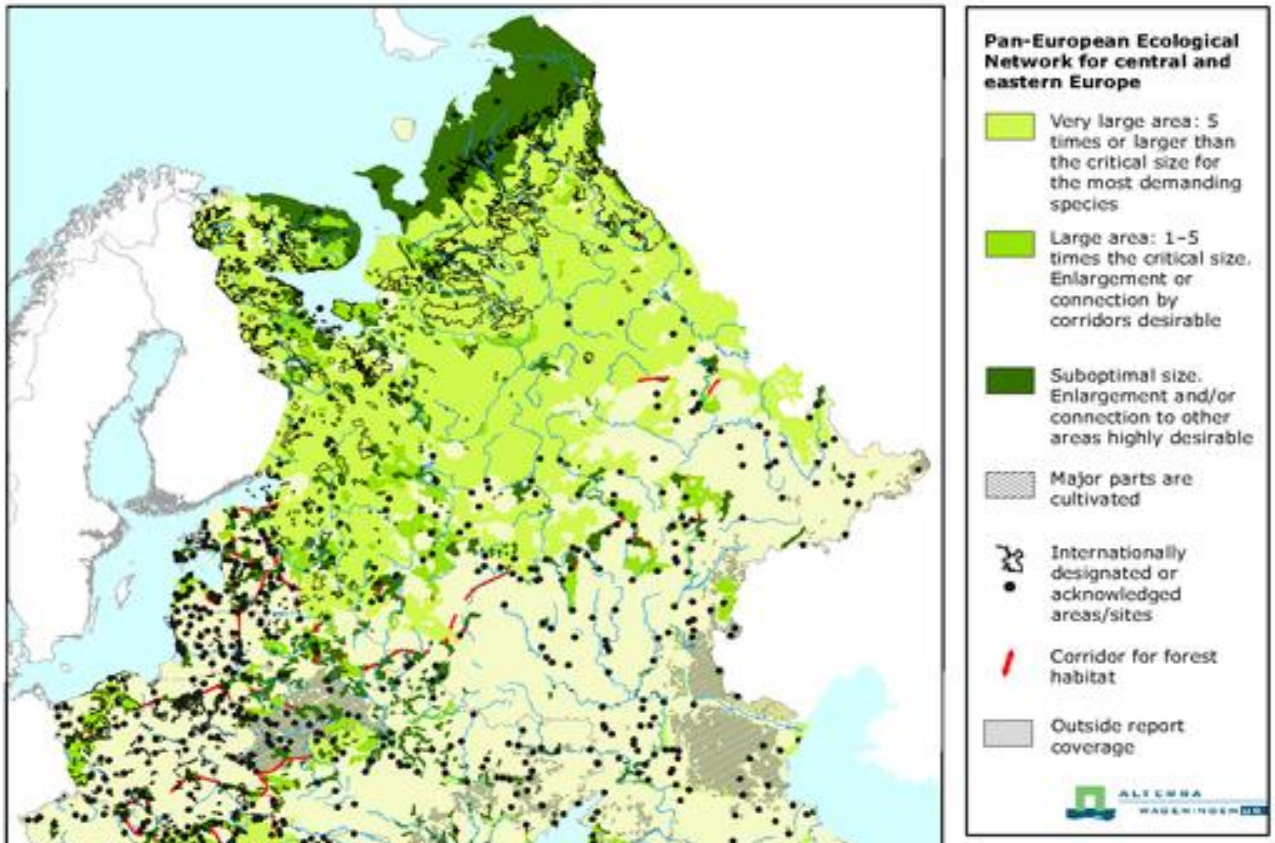
Wild boar fertility according to age classes and weight





Artificial corridors

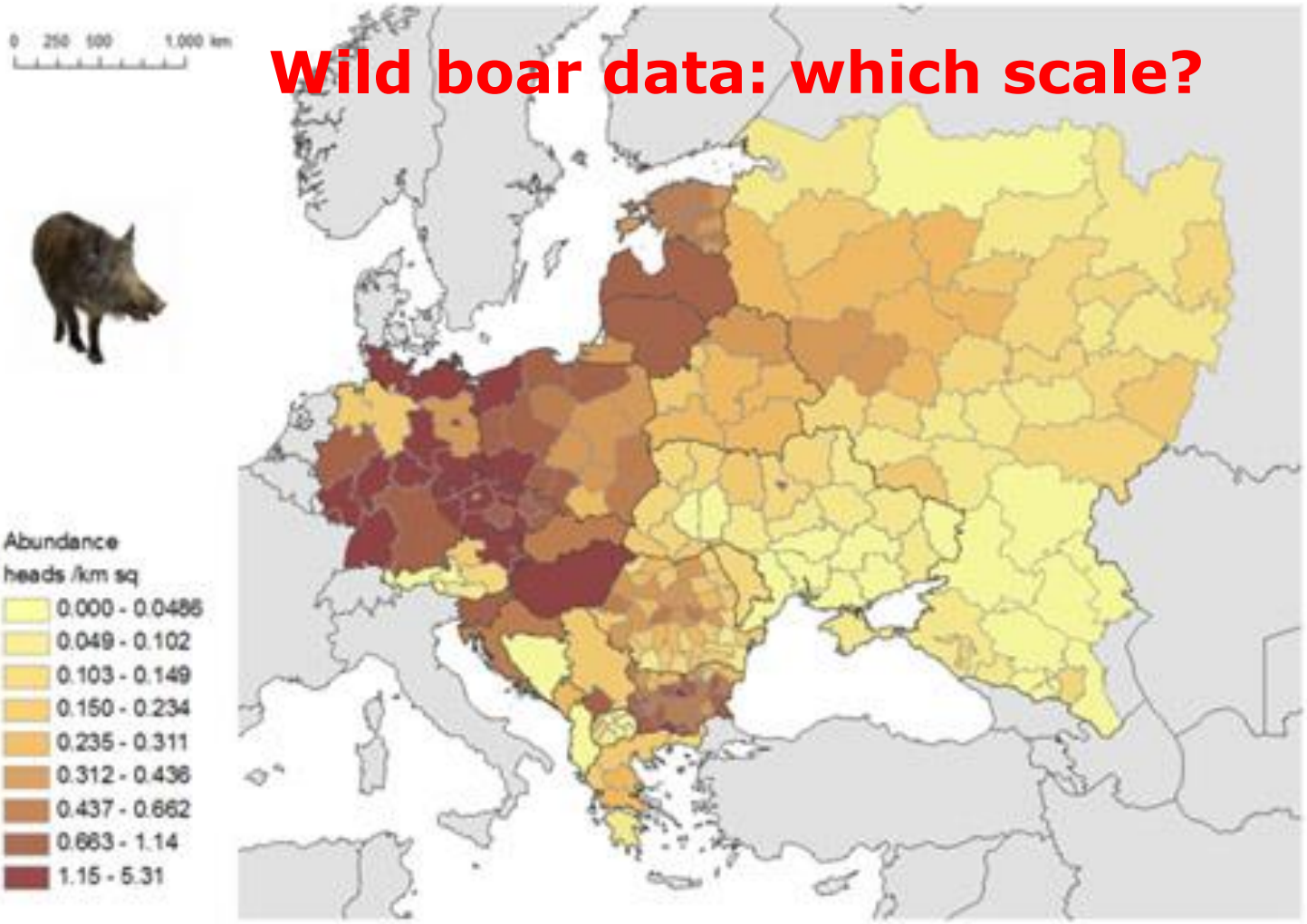


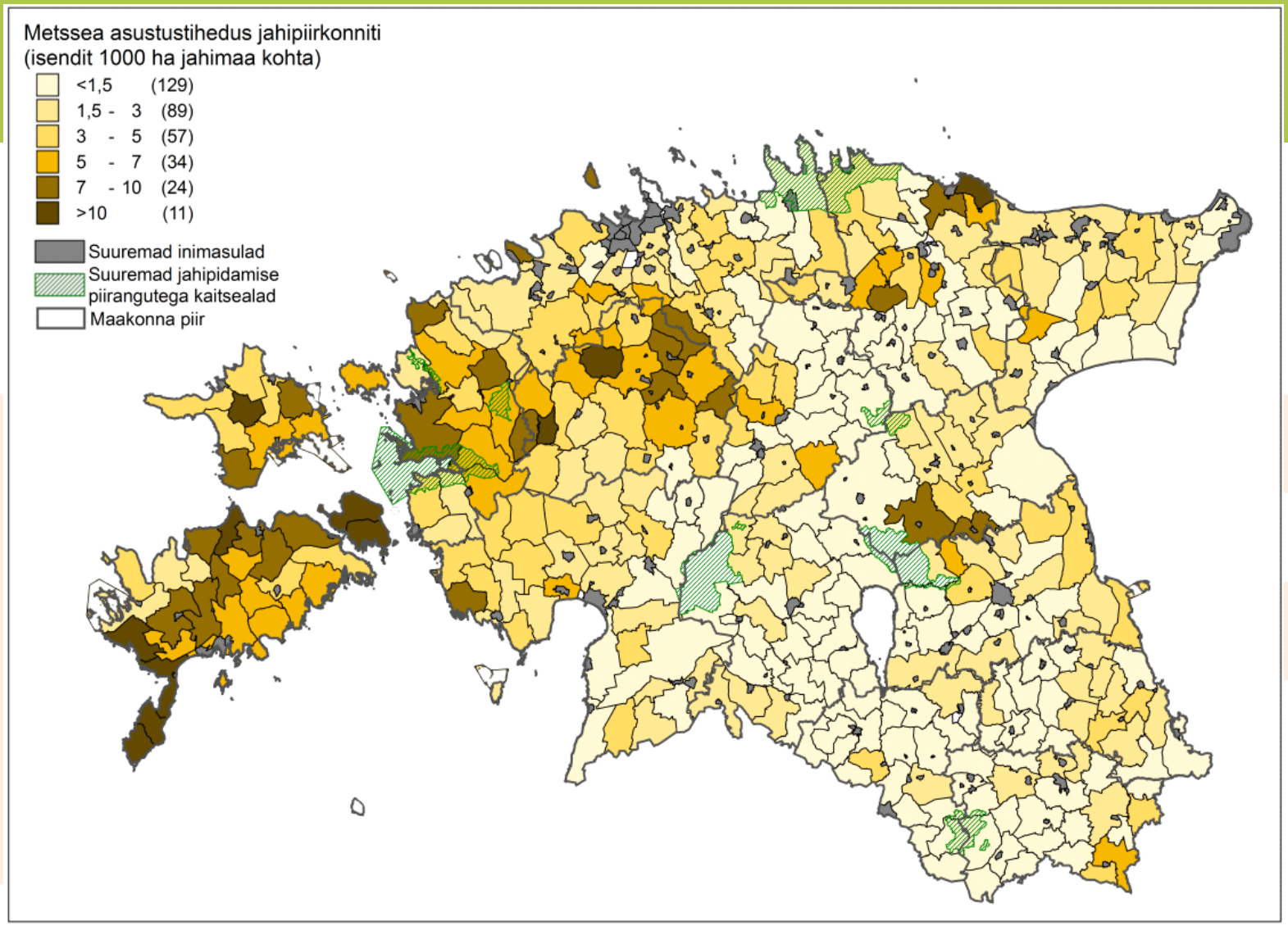

Pan-European Ecological Network for central and eastern Europe
Very large area: 5 times or larger than the critical size for the most demanding species
Large area: 1–5 times the critical size. Enlargement or connection by corridors desirable
Suboptimal size. Enlargement and/or connection to other areas highly desirable
Major parts are cultivated
Internationally designated or acknowledged areas/sites
Corridor for forest habitat
Outside report coverage
0 250 500 750 1000 Km

Which geographical scale?

Country, region, municipalitiy or hunting ground?

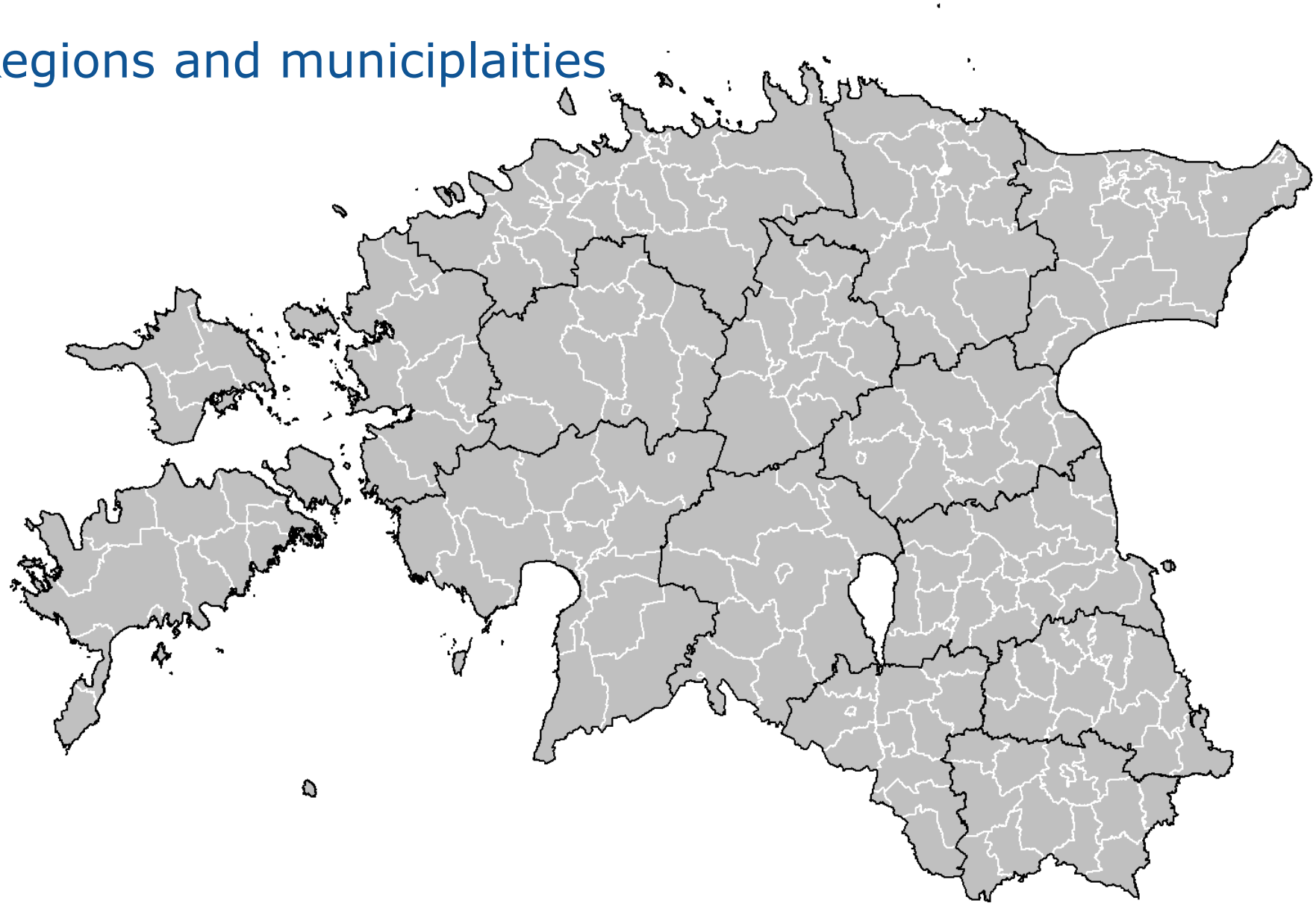
Wild boar data: which scale?

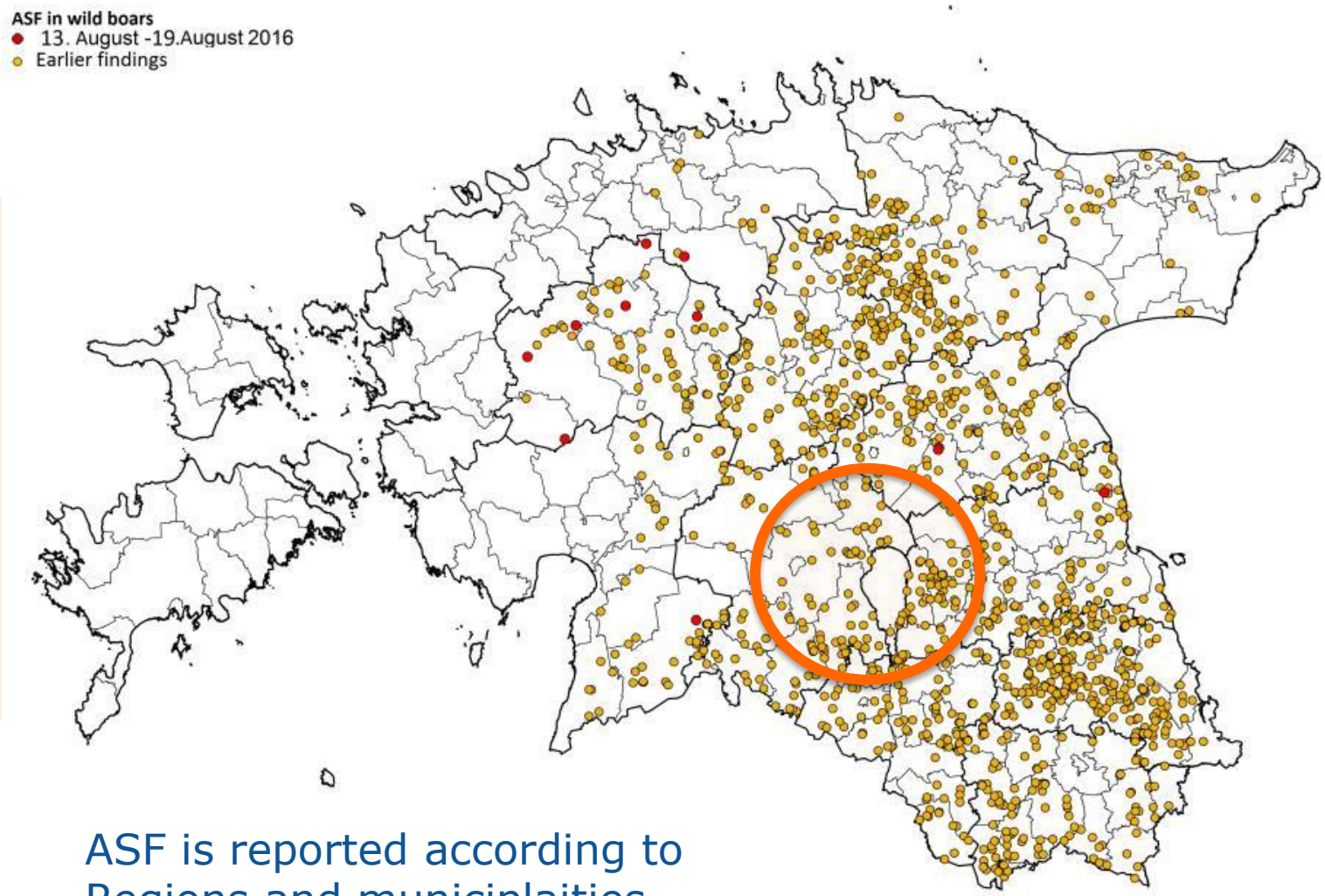




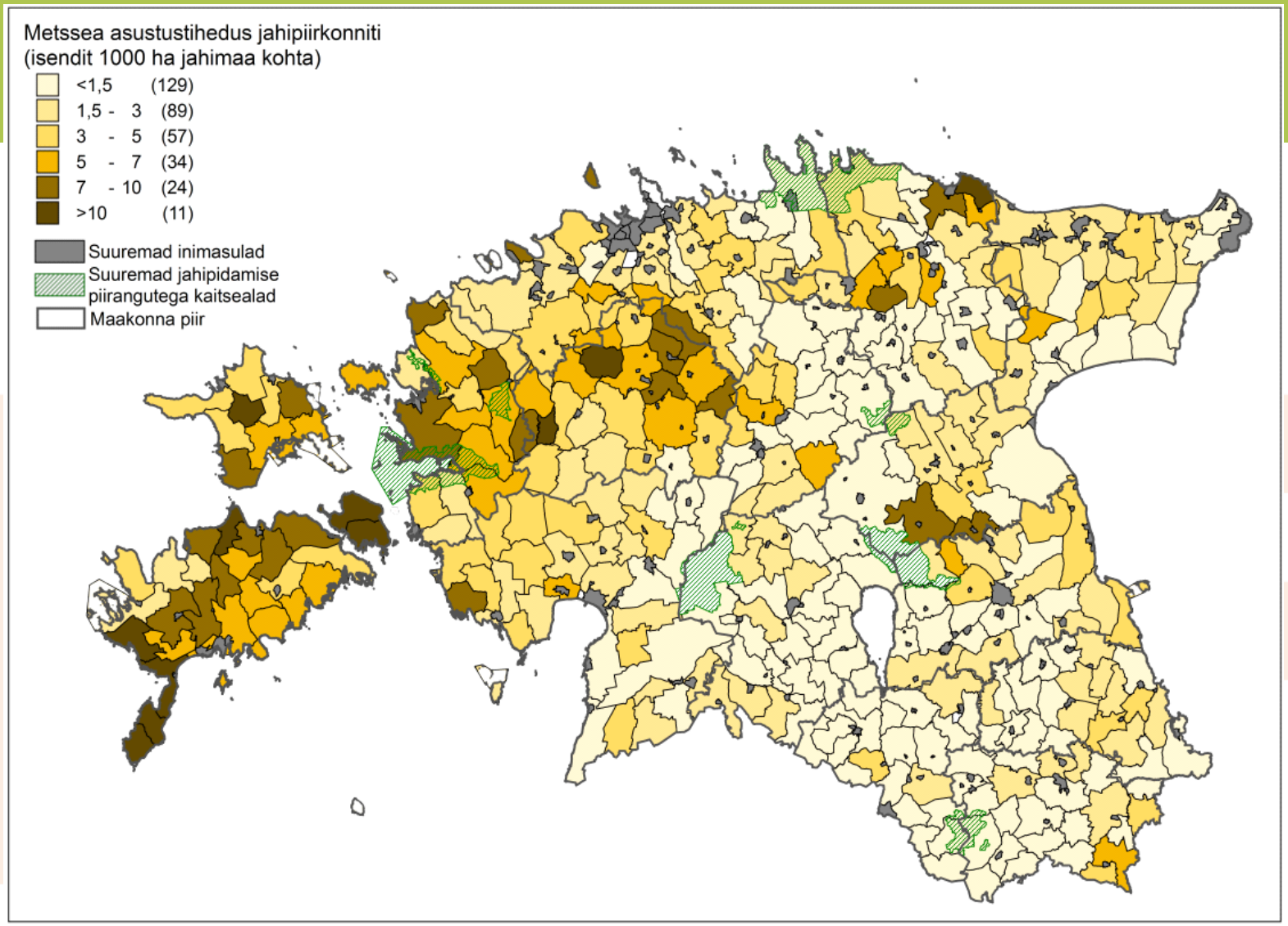
Density of wild boars (individuals per 1000 ha of hunting ground) in hunting districts by hunters estimations (census) in spring 2016.

Regions and municiplaities





ASF is reported according to Regions and municiplaities

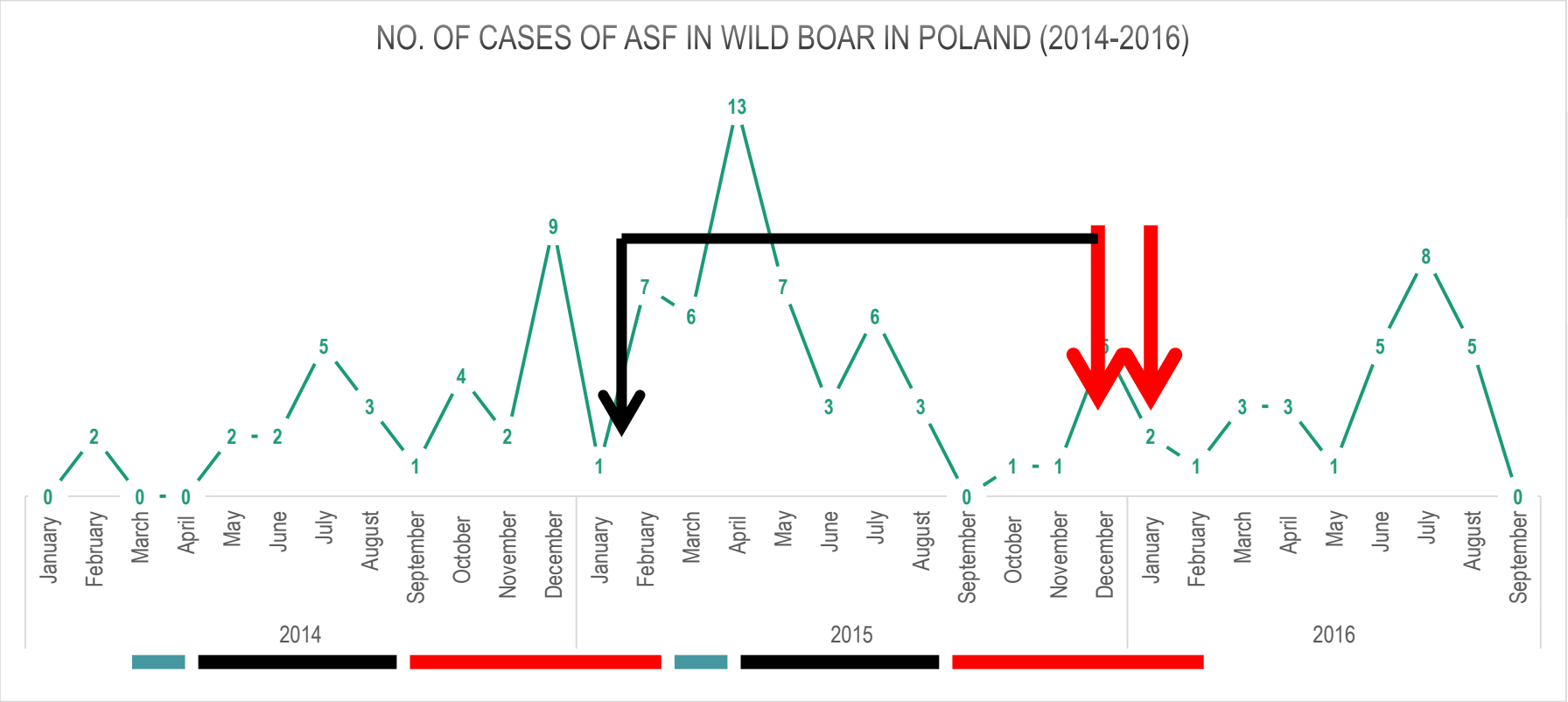


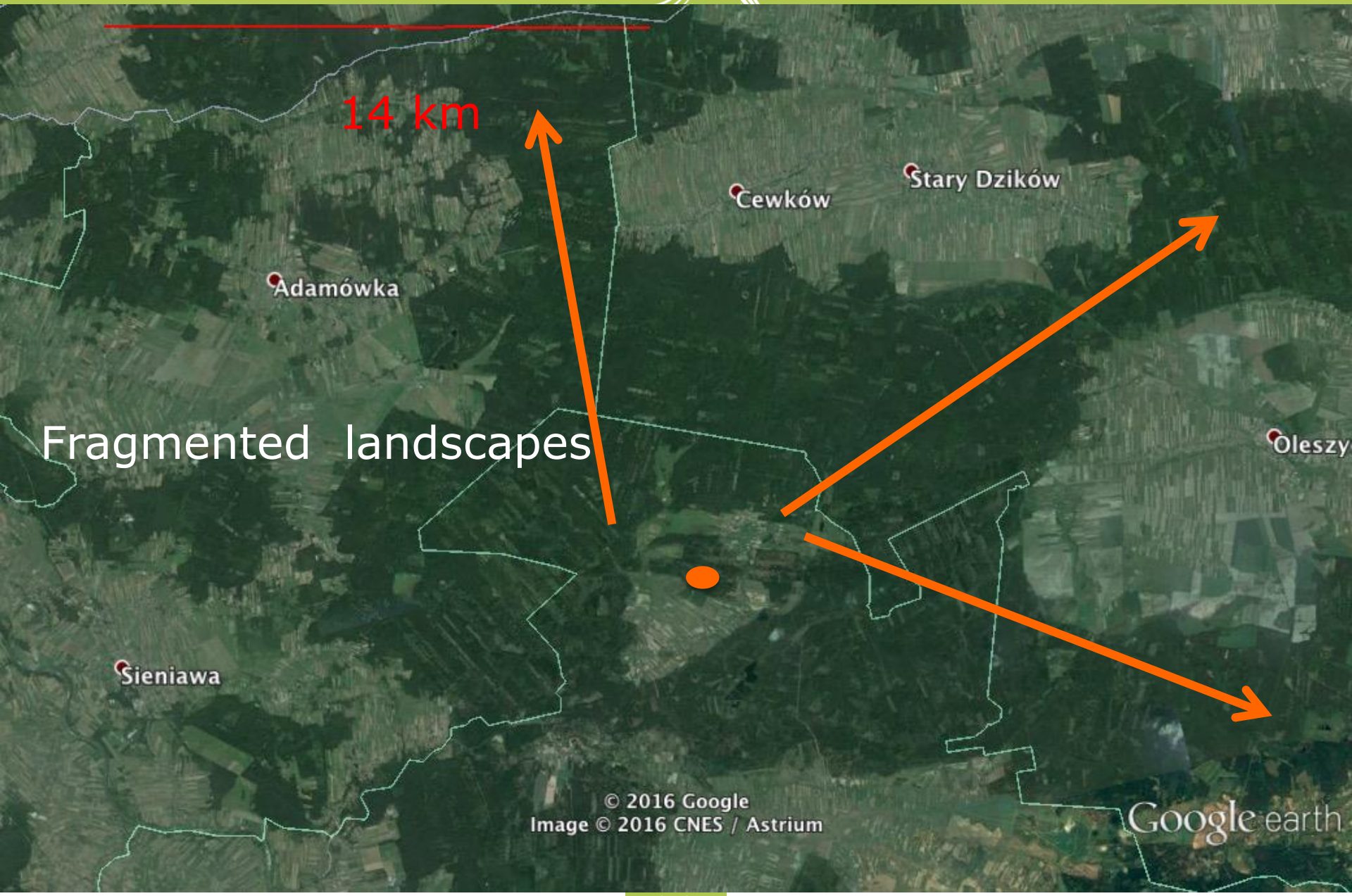
Density of wild boars (individuals per 1000 ha of hunting ground) in hunting districts by hunters estimations (census) in spring 2016.

Actions foreseen in wild boar infected areas: **hunting ground** is always the management unit

- Hunting regulations
- Define hunting bag and timing of hunt
- Hunting methodologies (driven hunts, targeted hunting etc.)
- Wild boar artificial feeding
- Biosecurity to be applied during hunting and related activities
- Sampling and testing shot wild boars
- Safe disposal of infected carcasses and hunted animals

ASF reporting: wild boar biology




14 km
Cewków
Stary Dzików
Adamówka
Fragmented landscapes
Oleszy
Sieniawa
© 2016 Google
Image © 2016 CNES / Astrium
Google earth

Take at home message

Eradication/control of ASF in wild boar is aimed in protecting domestic pigs

Wild boar infected area will last 24 months after the last virus detection

Small infected areas: will not ensure a good protection of the domestic pigs (ASF in wild boars not correctly managed)

Large infected areas: will affect the domestic pig sector due to restrictions

The infected area

large enough for a proper management of the infected wild boar management

Borders defined by wild boar management units (hunting grounds)

Data reported according to the wild boar biology and not (only) according to the calendar year


Thanks for the attention

Opera Srl

Viale Parioli 96 - 00197 Roma - Italy
Tel +39 06 96042652 Tel/Fax +39.06.8080111 / +39 06 89280678
btsftraining@btsftraining.com www.btsftraining.com; www.opera-italy.it

---

Better Training for Safer Food
BTSF

European Commission
Consumers, Health and Food Executive Agency
DRB A3/042
L-2920 Luxembourg

Food safety