



## Different hunting strategies

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## Wild boar - surveillance

- ✓ Wildlife surveillance mostly linked to hunting;
- ✓ Sampling rather irregular;
- ✓ Hunting seasonally limited;
- ✓ Rarely adequate number of samples collected;
- ✓ Mostly serological tests performed – only retrospective analysis.



## Role of hunters

- To hunt or not to hunt?
- Winter feeding ban – how realistic?
- Reduction of the population – who else?
- Increased hunting – motivation is needed?
- Selective hunting (female hunting) – would that work?
- Hunting ban – can it work?
- Restricted driven hunting...
- Collection and disposal of dead carcasses...



## Factors affecting population size

- Natural mortality – up to 20-30% (mostly piglets)
- ASF, CSF or other epidemics...
- Hunting:
  - Driven hunting (most efficient way to hunt wild boar)
  - Targeted (selective: sub-adult and adult female) hunting (most efficient way to reduce the population)
- Supplementary feeding – helps to sustain and increase the population



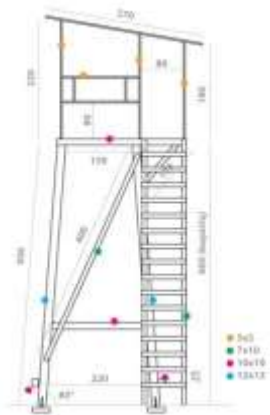
## Hunting methods

### Driven hunt



## Hunting methods

### Solo hunt






## To hunt or not to hunt?

Hunting could appear a simple and direct way to manage the number of susceptible animals in order to facilitate the control and the eradication of animal diseases (CSF, ASF, FMD).

However, hunting pressure may be counterproductive, since it may increase the size of the home-range of wild life meta populations, facilitating contacts between meta-populations, and promoting long distance movements of individual animals.





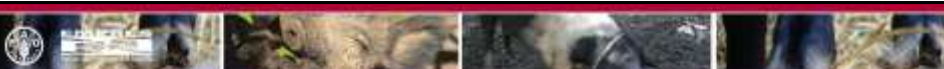
## To hunt or not to hunt?

Hunting may pose some additional risks, namely those related to the handling of infected carcasses and possible dispersal of virus in the environment by hunters.

However, hunting may be necessary for sampling purposes...



<http://www.animatedimages.org/cat-hunting-1267.htm>



## Hunting in the infected area

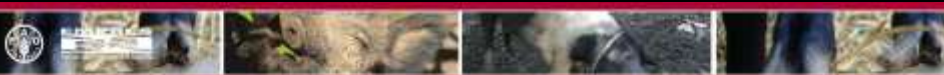
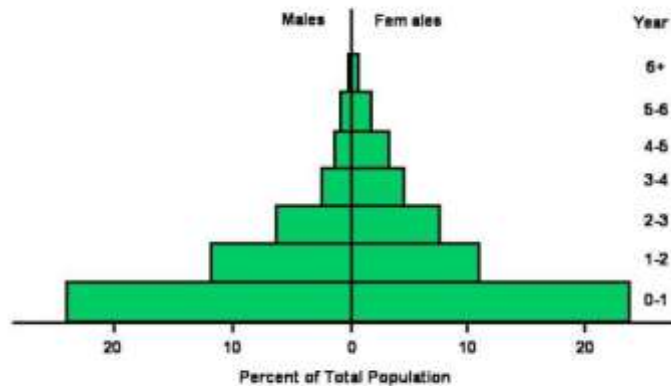
- Targeted hunting (applicable mainly for wild boars) (mainly young animals under one year of age) is assumed to temporarily decrease the number of susceptible animals and thus it should facilitate the fading out of the infection...?
- However, harvesting juveniles may leave enough breeding females to maintain a high birth rate, yielding susceptible animals that enable the disease to persist...





## Wild boar - population

Population pyramid showing the sex and age class composition of a typical population.



## Wild boar hunting management

During a year, typically the hunting quota consists of the following age groups of wild boar:

- sub adults under 1 year of age: 40 – 60%,
- young wild boar between 1 and 2 years of age: 20 – 40%,
- adults (more than 2 years of age): up to 20%.

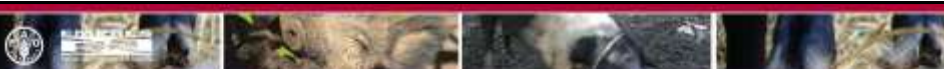
The proportion of sexes of wild boar in the hunting quota should be 1:1.

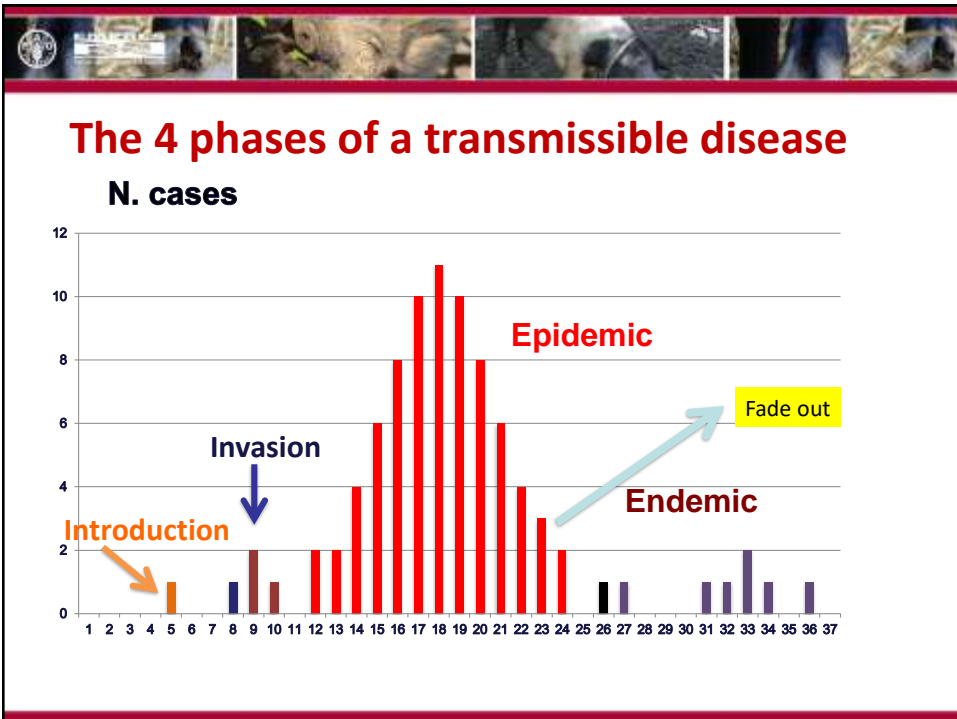




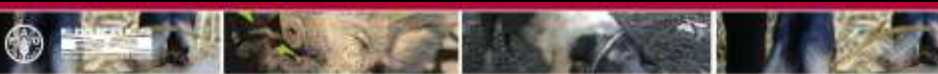
## Hunting in the infected area

- Alternatively, hunting targeting breeding females would decrease the population long-term.



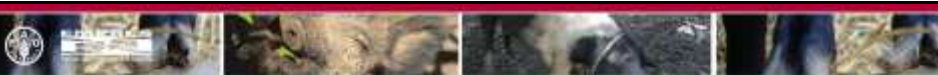






## Wild life diseases

- Wildlife diseases are often detected during the epidemic phase and rarely (if ever) during the invasion phase;
- Most of the eradication actions are attempted during epidemic phase;
- Attempts refer to threshold.....but for some of the diseases it does not exist anymore;
- The infection rate is always higher than any hunting rate;
- Hunting will simply slow down the contact rate among animals and thus slightly reduce prevalence;
- Hunting will accelerate and favor the endemic evolution of the infection...



## Baiting or supplementary feeding?



Source: [piterhunt.ru](http://piterhunt.ru)



## Supplementary feeding: why not?

- «Free ranging farm in the forest»;
- Concentration of the large number of animals;
- Could be the source of infectious agents and parasites;
- Unnecessary increase of the susceptible population - hunters cannot hunt / manage so many animals...



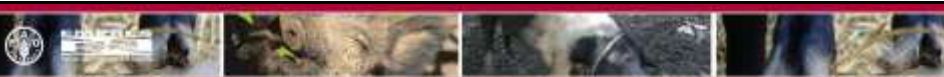
## How do we understand the baiting?



Photo: Ivars Koloda (LV)



## How do we understand the baiting?



## Effectiveness of baiting controls

- The purpose of controls: to check whether the baiting is really baiting (amount of the **feed** used)!
- These are not veterinary controls but they are very important;
- Clear competence and responsibilities (Competent authority defined);
- National legislation is essential;
- Sanctions (penalty, restrictions on hunting, reduction of licenses given etc.) need to be foreseen.



## Effectiveness of the baiting controls

How to organize these controls:

- 1.Planned controls (complex controls including other areas as hygiene, hunting etc.) – predefined frequency
- 2.Repeated controls (to check whether problem is solved)
- 3.Extraordinary controls – based on complaints, etc.



## Awareness – is the key issue

- - Regular training of hunters and forest rangers on clinical signs and contingency plan
- - Ensure they know their role in the system
- - Readiness – knowledge and equipment
- - Awareness campaigns (regular and repeated)
- - Regular communication .....



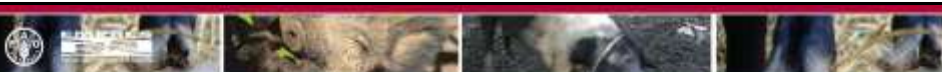
## HUNTING AND WILDLIFE DISEASES

### **Hunting could be counteractive:**

When carried out without any biosecurity measure;

When misused as a wildlife diseases management tool;

When driving host population management toward high density, high turn-over, unbalanced age and gender structure...



Thank you for the attention