

# APHAEA

harmonized **A**pproaches in monitoring wildlife **P**opulation **H**ealth, **A**nd **E**cology and **A**bundance



Kick-off meeting

ARTEMIS Utrecht, The Netherlands

June 5th 2012



# APHAEA Goals

- A. To determine harmonized methods for estimating abundance of key wildlife host species in Europe;
- B. To develop harmonized methods for collecting and analyzing samples to diagnose key wildlife pathogens in Europe;
- C. To generate information on the practical feasibility and added value of the harmonized methods by field-validating them on selected wildlife host-pathogen pairs in Europe;
- D. To develop a European wildlife disease network in which harmonized methods are adopted for estimating species abundance and for diagnosing pathogens in key wildlife host species and key wildlife pathogens in Europe.

# Key hosts

- Model hosts
  - Eurasian wild boar
  - Red fox
  - Rodents
- Other relevant hosts:
  - wild carnivores
  - deer
  - bovids
  - lagomorphs
  - birds



# Key pathogens

- *Anaplasma* spp., African swine fever virus, **Aujeszky's disease virus**, *Bacillus anthracis*, Bluetongue virus, *Brucella abortus*, *Brucella melitensis*, *Brucella suis*, *Campylobacter jejuni*, Classical swine fever virus, *Coxiella burnetii*, ***Echinococcus multilocularis***, Encephalomyocarditis virus, European brown hare syndrome virus, ***Francisella tularensis***, Hantavirus, Hepatitis E virus, Highly pathogenic avian influenza virus, *Leptospira* spp., *Listeria monocytogenes*, Lymphocytic choriomeningitis virus, *Mycobacterium avium paratuberculosis*, *Mycobacterium bovis*, *Neospora caninum*, *Pasteurella multocida*, Pathogenic *Escherichia coli*, Rabies virus, *Salmonella enteridis*, *Salmonella typhimurium*, Tick-borne encephalitis virus, *Toxoplasma gondii*, *Trichinella* spp., and West Nile virus.

Partners		P1ES			P2IT			P3GE			P4FR			P5SE			P6CH			P7DK		
		C	E	A	C	E	A	C	E	A	C	E	A	C	E	A	C	E	A	C	E	A
<b>WP1:</b> <i>Abundance and habitat disturbance monitoring tools</i>			█		█	█		█	█			█				█			█			█
<b>WP2:</b> <i>Sampling and diagnostic tools</i>				█	█	█		█	█				█	█	█			█				█
<b>WP 3 :</b> <i>Test of harmonised methods in selected hosts/pathogens</i>								█														
	3.1: Wild boar		█			█		█	█				█			█		█				█
	3.2: Red fox							█	█				█	█	█				█		█	
	3.3: Rodents									█	█	█		█	█				█		█	
<b>WP 4:</b> <i>Development of European wildlife disease network</i>				█			█			█			█			█	█	█				█
<b>WP 5:</b> <i>Consortium coordination and management</i>		█	█				█			█			█			█			█			█

C = Coordinates the Work package, monitors the progress and reports to the Executive Board as WP leader

E = Executes the work

A = Provides expert advice, data and input to other partner(s)

# Work package 1:

## Harmonized methods for estimating **abundance** of wildlife host species in Europe

- Main objective: To develop harmonized methods for estimating abundance of key wildlife host species in Europe
- Subobjective 1: To develop an **overview of the current methods** for estimating abundance of key wildlife host species in Europe by means of literature review and consultation with target groups in European wildlife disease network
- Subobjective 2: To **develop harmonized protocols** for estimating abundance of key wildlife host species in Europe.

## Work package 2:

### Harmonized methods for **sample collection and diagnosis** for wildlife pathogens in Europe

- **review** the literature and solicit information from members of the European wildlife disease network to obtain both published and unpublished data on current methods of sample collection and laboratory diagnosis for above pathogens.
- **harmonize** methods of sampling and laboratory diagnosis for each key wildlife pathogen.

# Work package 3:

**Validation** of harmonized methods on selected wildlife  
host-pathogen pairs

- Three models for method validation:
  1. Wild boar & Aujeszky's disease virus
  2. Red fox & *Echinococcus multilocularis*
  3. Rodents & *Francisella tularensis*



# Work package 4:

## Development of a European wildlife disease **network**

- Main objective: To develop a European wildlife disease network in which harmonized methods are adopted for estimating species abundance and for diagnosing pathogens in key wildlife host species and key wildlife pathogens in Europe
  - Subobjective 1: To set up and maintain a European wildlife disease **network** including European countries beyond Aphaea partners
  - Subobjective 2: To **involve European wildlife disease network** beyond Aphaea partners in the development of harmonized methods methods for estimating species abundance and for diagnosing pathogens in key wildlife host species and key wildlife pathogens.

# Work package 5: Consortium management

- **Executive Board** (PI's of all partners)
  - meets face to face twice a year (months 1 (kick-off), 6,12,18 etc)
  - reports to the EMIDA office, through the Coordinator (P1)
  - EB members are responsible for meeting their respective national (financial and technical) progress reporting requirements.
- **Work package leaders** are responsible for:
  - monitoring the progress of their work packages against the milestones and deliverables
  - report back to the EB on a quarterly basis
- **Coordinator** is responsible for:
  - setting the agenda and distributing the documents prior to the EB meetings
  - development and distribution of meeting minutes