



Training course on FOREIGN ANIMAL DISEASES

SEPTEMBER 13 – 16, 2010 NOVEMBER 15 –19, 2010

TERAMO (ITALY)

Learning project





Introduction

Over the past few decades, the geographical distribution of the so called animal "foreign diseases", has dramatically expanded because of many factors, such as the ecologic, climatic and environmental changes and the evolution of political, economic and commercial systems.

The sanitary systems of single countries must pay attention to the contexts complexity in which old and new diseases appear and reappear, and, in order to properly manage public and animal health, as well as protection and safeguard of their economy, they must uniform and harmonise surveillance and control actions.

Training of official veterinarians on the recognition and diagnosis of foreign animal diseases and on the management of a monitoring and surveillance system, has become a strategic priority also for the Italian National Health Service, and this training project intends to satisfy this need.

The Italian National Reference Centre for Exotic Diseases of Animals of Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise (Istituto "G. Caporale")—OIE Collaborating Centre for veterinary training, epidemiology, food safety and animal welfare and OIE Reference Laboratory for CBPP, BT, WND and Brucellosis—in collaboration with the Department of Veterinary Tropical Diseases of the University of Pretoria—OIE Collaborating Centre for Training in Integrated Livestock and Wildlife Health and Management, strongly believe that effective training is crucial for disease control and for an appropriate management of efficient veterinary services.

This course offers a unique opportunity to learn from some of the most qualified and experienced researchers acknowledged by the international scientific community, using advanced and validated teaching methodologies. This, to guarantee high levels of learning achievements as well as higher opportunities to face in an appropriate manner possible emergencies which might occur in the Italian territory.

Objectives and beneficiaries

This course aims at providing Italian Public Veterinary Officers belonging to the National Competent Authority, the Regional Veterinary Services, and Istituti Zooprofilattici Sperimentali with the necessary tools to recognise, detect, diagnose and control vector borne and other transmittable exotic diseases.

The improvement of such skills will be enhanced through the achievement of the following learning objectives:

- to learn disease characteristics in terms of aetiology, pathogenesis, epidemiology, symptomatology, pathology, diagnosis and prophylaxis;
- to learn how to use and apply appropriate methods to define a monitoring and continuous surveillance system of exotic diseases, according to the geographical and climatic characteristics of the belonging territory.





Course Methodology

The training approach stresses the dynamic interaction between tutors and attendants, aimed at stimulating the active participation of both parties to the learning process.

It is based on the singling out of the operational functions required by the trainee, on converting these functions into educational goals and on the evaluation of whether these goals are met or not.

This therefore means that the course not only draws upon the academic knowledge of the "expert" but also upon the experience of the trainees thus assigning them an active role in the training process.

The methodology defined thus drawn upon:

- Lectures by experts in the sector
- Group work
- Study and discussion of typical cases
- Exercises and simulations on educational goals
- Assessment of achievement.

General contents

General	History
description of	Aetiology
the contents to	Pathogenesis
be included for	Epidemiology
each disease	Role of wild animals
	Clinical and anatomo-histopathological framework of the
	disease
	Diagnosis
	Prevention and control
	Prompt reporting to the international community (OIE and
	rapid alert systems)





Course Tutors

This course is implemented by the Italian National Reference Centre for foreign diseases of animals of Istituto "G. Caporale", in collaboration with the Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria (South Africa).

Tutors are recruited in the two OIE Collaborating Centres, as well as in other international research centres where scientific and technical expertise in the field of foreign diseases of animals is available.

Course scientific coordinator

Rossella Lelli

List of tutors

Paolo Calistri (Istituto "G. Caporale", Italy)

Koos Coetzer (University of Pretoria, South Africa)

Truuske Gerdes (Onderstepoort Veterinary Institute, South Africa)

Alan Guthrie (University of Pretoria, South Africa)

Geneviève Libeau (CIRAD)

Peter G. Jupp (University of the Witwatersrand, South Africa)

Maxime Madder (Institute of Tropical Medicine, Belgium)

Olga Mangana (Centre of Athens Veterinary Institutions, Greece)

Federica Monaco (Istituto "G. Caporale", Italy)

Eileen Ostlund (APHIS - USDA, United States of America)

Attilio Pini (Istituto "G. Caporale", Italy)

Domenico Rutili (Istituto "G. Caporale", Italy)

Flavio Sacchini (Istituto "G. Caporale", Italy)

Massimo Scacchia (Istituto "G. Caporale", Italy)

Sean V. Shadomy (CDC, Atlanta)

Hein Stoltsz (University of Pretoria, South Africa)

Gavin Thomson (SADC, South Africa)

Gert Venter (Onderstepoort Veterinary Institute, South Africa)

Training coordinator

Ombretta Pediconi





Module 1: Diseases transmitted by vectors **Item 1:** Diseases transmitted by mosquitoes

Learning objectives

At the end of the module the participant will:

- know the aetiology, pathogenesis, epidemiology, symptomatology, pathology, diagnosis and prophylaxis of Rift Valley Fever, West Nile Disease, Eastern, Western and Venezuelan Equine Encephalites;
- be aware of the recent developments achieved by research in the prevention, diagnosis and control of those diseases;
- assess and adopt control and prophylaxis measures against Rift Valley Fever, West Nile Disease, Eastern, Western and Venezuelan Equine Encephalites.

Day I	Time	Location	Tutor	Activity
	8,15		Secretariat	Registration
	8,30		Istituto	Welcome address
			"G. Caporale"	Training course presentation
			R. Lelli	
	9,00		P. Jupp	Biology and control of vectors (I part)
	11,00]	-	Coffee break
13 September	11,30		P. Jupp	Biology and control of vectors (II part)
2010	12,30	CIFIV	P. Jupp	Facilitated Discussion
	13,00		-	Lunch
	14,00		P. Jupp	Case study
	15,30		•	Coffee break
	16,00		P. Jupp	Biology and control of vectors (III part)
	17,30		P. Jupp	Facilitated Discussion
	18,30		-	End of the training day
Day II	Time	Location	Tutor	Activity
	9,00		K. Coetzer	Rift Valley Fever
	11,00		-	Coffee break
14 September	11,30		F. Monaco, P. Calistri	West Nile Disease
	13,30		-	Lunch
	14,30		E. Ostlund	Eastern, Western and Venezuelan
September	14,30		L. Ostidila	
September 2010		CIFIV	-	Equine Encephalites (I part)
•	16,00 16,30	CIFIV	E. Ostlund	Equine Encephalites (I part) Coffee break
•	16,00	CIFIV	-	Equine Encephalites (I part)
•	16,00	CIFIV	-	Equine Encephalites (I part) Coffee break Eastern, Western and Venezuelan
•	16,00 16,30	CIFIV	- E. Ostlund	Equine Encephalites (I part) Coffee break Eastern, Western and Venezuelan Equine Encephalites (II part)





Module 1: Diseases transmitted by vectors

Item 2: Tick borne diseases

Learning objectives

At the end of this module participants will:

- know the aetiology, pathogenesis, epidemiology, symptomatology, pathology, diagnosis and prophylaxis of East Cost Fever, Heartwater Disease, Congo Crimean Haemorrhagic Fever
- be aware of the recent developments achieved by research in the prevention, diagnosis and control of those diseases;
- assess and adopt control and prophylaxis measures against East Cost Fever, Heartwater, Congo Crimean Haemorrhagic Fever.

Day III	Time	Location	Tutor	Activity
	9,00		M. Madder H. Stoltsz	Biology and control of vectors (I part)
	11,00		-	Coffee break
	11,30		M. Madder H. Stoltsz	Biology and control of vectors (II part)
15	13,00		-	Lunch
15 September	14,00	CIFIV	M. Madder H. Stoltsz	Case study
2010	15,30		-	Coffee break
	16,00		M. Madder H. Stoltsz	Biology and control of vectors (III part)
	18,00		All tutors facilitate	Facilitated Discussion
	18,30		-	End of the training day
Day IV	Time	Location	Tutor	Activity
	9,00		H. Stoltsz	East Cost Fever
16 September 2010	11,00		-	Coffee break
	11,30		H. Stoltsz	Heartwater disease
	13,30		-	Lunch
	14,30		All tutors facilitate	Facilitated discussion
	15,30		-	Coffee break
	16,00		H. Stoltsz M. Madder	Congo Crimean Haemorrhagic Fever
	17,00		All tutors facilitate	Facilitated discussion
	17,30		-	End of the training day





Module 1: Diseases transmitted by vectors **Item 3:** Diseases transmitted by culicoides

Learning objectives

At the end of the module the participant will:

- know the aetiology, pathogenesis, epidemiology, symptomatology, pathology, diagnosis and prophylaxis of the African Horse Sickness, Bluetongue, Equine Encephalosis, Epizootic Hemorrhagic Disease;
- be aware of the recent developments achieved by research in the prevention, diagnosis and control of those diseases;
- assess and adopt control and prophylaxis measures against the African Horse Sickness (AHS), Bluetongue, Equine Encephalosis, Epizootic Hemorrhagic Disease.

Day V	Time	Location	Tutor	Activity
15 November 2010	9,00		G. Venter	General introduction on orbivirus transmitted by culicoides (I part)
	11,00		-	Coffee break
	11,30		G. Venter	General introduction on orbivirus transmitted by culicoides (II part)
	13,30		-	Lunch
	14,30	CIFIV	G. Venter	Biology and control of vectors (I part)
	16,00		-	Coffee break
	16,30		G. Venter	Biology and control of vectors (II part)
	17,30		G. Venter	Facilitated discussion
	18,00		-	End of the training day
Day VI	Time	Location	Tutor	Activity
	9,00		A. Guthrie	African Horse Sickness
	11,00			Coffee break
i l			-	Conee break
	11,30		T. Gerdes	Bluetongue
16	11,30 13,30		1	Bluetongue Lunch
16 November 2010	11,30 13,30 14,30	CIFIV	T. Gerdes - A. Guthrie	Bluetongue
November	11,30 13,30 14,30	CIFIV	- A. Guthrie -	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break
November	11,30 13,30 14,30 16,30 17,00	CIFIV	1	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion
November	11,30 13,30 14,30	CIFIV	- A. Guthrie -	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break
November	11,30 13,30 14,30 16,30 17,00	CIFIV	- A. Guthrie -	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion
November 2010	11,30 13,30 14,30 16,30 17,00 17,30		- A. Guthrie - All tutors facilitate -	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion End of the training day
November 2010 Day VII	11,30 13,30 14,30 16,30 17,00 17,30 Time 9,00 11,00		- A. Guthrie - All tutors facilitate - Tutor	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion End of the training day Activity Epizootic Hemorrhagic Disease Coffee break
November 2010 Day VII 17 November	11,30 13,30 14,30 16,30 17,00 17,30 Time 9,00 11,00 11,30	Location	- A. Guthrie - All tutors facilitate - Tutor	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion End of the training day Activity Epizootic Hemorrhagic Disease Coffee break Case study
November 2010 Day VII	11,30 13,30 14,30 16,30 17,00 17,30 Time 9,00 11,00		- A. Guthrie - All tutors facilitate - Tutor	Bluetongue Lunch Equine Encephalosis and its differential diagnosis Coffee break Facilitated discussion End of the training day Activity Epizootic Hemorrhagic Disease Coffee break





Module 2: other diseases

Learning objectives

At the end of the module the participant will:

- Know the aetiology, pathogenesis, epidemiology, symptomatology, pathology, diagnosis and prophylaxis of Peste des Petits Ruminants, Sheep Pox, Classical Swine Fever and African Swine Fever, Foot-and-Mouth Disease, Lumpy Skin Disease, Contagious Bovine Pleuropneumonia, Anthrax, Ephemeral Fever;
- be aware of the recent developments achieved by research in the prevention, diagnosis and control of those diseases;
- assess and adopt control and prophylaxis measures against Peste des Petits Ruminants, Sheep Pox, Classical Swine Fever and African Swine Fever, Footand-Mouth Disease, Lumpy Skin Disease, Contagious Bovine Pleuropneumonia, Anthrax, Ephemeral Fever.

Day VII	Time	Location	Tutor	Activity
17 November 2010	14,00	CIFIV	G. Libeau	Peste des Petits Ruminants
	16,00		-	Coffee break
	16,30		O. Mangana, F. Monaco	Sheep Pox
	18,30		-	End of the training day
Day VIII	Time	Location	Tutor	Activity
	9,00		D. Rutili	Classical Swine Fever
	11,00		-	Coffee break
18	11,30		D. Rutili	African Swine Fever
November	13,30		-	Lunch
2010	14,30		G. Thomson	Foot-and-Mouth Disease
2010	16,00	CIFIV	-	Coffee break
	16,30		K. Coetzer	Lumpy Skin Disease
	18,00		-	End of the training day
Day IX	Time	Location	Tutor	Activity
	9,00		A. Pini, F. Sacchini, M. Scacchia	Contagious Bovine Pleuropneumonia
	11,00		-	Coffee break
19	11,30	_	S. V. Shadomy	Antrax
November	13,30	QIEIV.	-	Lunch
2010	14,30		M. van Vuuren	Ephemeral Fever
	16,30		-	Coffee break
	17,00	CIFIV	-	Final evaluation
	18,00		-	End of the training course