



BWDS NEWSLETTER

2009/02

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1. Report of the General Assembly on May 27th, 2009

Present: Alexandre Dobly¹, Paul Heyman², Paul Tavernier^{1,3}, Sophie Roelandt¹, Martine Van Den Broeck³, Geert Michels⁴, Goedele Verbeylen⁵, Jan De Paepe⁶, Kristof Baert⁷, Paul Simoens³, Renaud Poizat⁸, Stefan Roels¹, Jan Stuyck⁷, Jim Casaer⁷, Guy de Pooter⁹, André De Ryck⁹, Pol Simons², Jan De Borchgraeve¹⁰, Marc Govaerts¹, Steven Van Gucht¹¹, Els Goossens¹, Muriel Vervaeke¹²

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Excused: Dominique Vandekerchove, Hilde Van Meirhaeghe, Victor Luyasu, Patrick Butaye, Bertrand Losson, Marc Dispas, Daisy Van Rompaey, Stéphane De Craeye, Leen Claes, Pierre Wattiau

1. Presentations

A first presentation was given by Prof. Paul Simoens of the Department Morphology, Veterinary Faculty, Ghent University. This presentation included two subjects: (1) Practical guidelines for blood sampling in hunted roe deer and (2) Age determination in roe deer. The second presentation was given by M.Sc. Sophie Roelandt, cooperator of the WILDSURV project at CODA/CERVA/VAR, on myxomatosis in wild rabbits.

The short abstracts of the presentations are included below in this Newsletter.

2. Administrative Chapter

The administrative Chapter included one single agenda point, being the providing of feedback to the cooperators/hunters of the preliminary network for blood-sampling in roe deer in Flanders within the frame of the WILDSURV project. The cooperators/hunters were especially invited to this meeting which offered them at the same time the possibility to attend the presentation of Prof. P. Simoens.

On the number of good quality sera that were obtained and examined until the moment of this meeting, the detected seroprevalences amounted to 5% for leptospirosis (n=38), 6% for paratuberculosis (n=36), 3 % for Q-Fever (n=37) and 0% for bluetongue (n=31). Sampling will be continued in the next hunting seasons in order to obtain a larger sample size, and the seroprevalences of other diseases will be determined including anaplasmosis, pestiviroses, brucellosis and others. The WILDSURV team wishes to express its

sincere gratitude to the cooperating hunters for their interest and their efforts to provide the blood samples, which is not an easy task. We hope to be able to develop this preliminary network further on in the future. (*Reporter: P.Tavernier*)

2. Abstracts of presentations on May 27th, 2009

1) Presentation P. Simoens

Blood sampling and age determination in roe deer

Prof. Paul Simoens, Department of Morphology, Veterinary Faculty, Ghent University

Preliminary dissections in roe deer have demonstrated that the jugular veins are suitable for blood sampling in freshly killed roe deer. The left and right jugular veins are located in a shallow groove that can be seen and palpated at the level of the trachea in the lower part of the neck. The veins can be punctured near the thoracic inlet by means of a large needle, which is subsequently attached to a syringe or vacuum test tube. Venipuncture of the caudal vena cava, either in the abdominal cavity at the level of the kidneys or in the thoracic cavity between the heart and the diaphragm, is hampered by the deep position of the vein and its possible laceration due to gun shot impact. Cardiac puncture by inserting a large needle between the ribs above the elbow is hampered by the thick cardiac musculature, fast blood coagulation, and frequent cardiac trauma following thoracic bullet impact. Blood sampling from the large superficial veins on the fore- and hindlimbs was unsuccessful and not practical.

Age determination of wild animals, including roe deer, is a most valuable procedure for population evaluation and management. Assessment of external features, such as general body conformation or antler development and shedding, offers merely an approximate and rough estimate of age. The same is valid for the size of the cardiac bones, the ossification of the laryngeal cartilages and the volume of the eye lens. More precise information can be obtained by detailed examination of the teeth (deciduous vs. permanent teeth, dental shedding, tooth wear, and the number of cement and dentine rings). However, these data are subject to considerable regional and individual variations. Additional and most valuable information results from studying the closure of the growth plates in the long bones. In contrast to the situation in other wild and domestic animals, however, this feature is hardly documented for roe deer, and therefore the presence and disappearance of the growth plates will be examined both anatomically and radiographically in animals of various age categories. Donations of roe deer cadavers of ascertained ages for this study will be gratefully acknowledged.

2) Presentation S. Roelandt

Myxomatosis in Rabbits as a Disease and a Biological Control.

M. Sc. Sophie Roelandt, Wildsurv Project, CODA/CERVA/VAR, Brussels

Myxoma-virus belongs to the genus of Leporipox-viruses and shows the typical characteristics of Pox-viruses. The American cottontail rabbits (*Sylvilagus* spp.) are the natural hosts of the Brazilian and Californian strains and these rabbits show only a localised fibroma without systemic signs. In the European rabbit (*Oryctolagus cuniculus*), the myxoma-virus causes myxomatous skin lesions or amyxomatous myxomatosis with purely respiratory signs. The observed differences in clinical signs in natural hosts and in European rabbits can be explained by different immunologic responses.

In Australia, introduced European rabbits proved to be an agricultural and ecological pest. Therefore myxomatosis was released as a biocontrol measure in 1950 and the results were overwhelmingly effective. By 1956 attenuated myxoma-virus strains had emerged and became dominant in the field. By the 1960s genetic resistance had developed amongst the rabbits as a result of a pathogen-host co-evolution which could be modelled mathematically. Australia is moving towards an Integrated Pest Control, combining traditional destruction methods with biocontrol (Rabbit Hemorrhagic Disease and Myxomatosis). More recently VVIC (viral vectored immunocontraception) is being developed as a more humane control method.

In Europe, Prof. Armand-Delille unintentionally caused a myxomatosis epidemic in 1952 by inoculating two rabbits on his estate in France. The virus escaped and by 1954 had caused severe mortality in wild and domestic rabbit populations while spreading through Europe and North-Africa. Coevolution occurred just as in Australia, but in the early 1980s amyxomatous strains emerged in farmed rabbits in France and in Belgium. .

In France and the UK, ecosystems seem to have recovered and rabbit populations are on the increase, but in Spain there has been no recovery and myxomatosis has proved to be disastrous for the Mediterranean ecosystem, leading to decimation of the populations of rabbit-dependent predators (Iberian Lynx, Spanish Imperial Eagle).

The history of myxomatosis and its epizootics in the last century have contributed substantially to our knowledge on host/pathogen coevolution and biological control of pest species, Depending on the local situation, a choice for “control vs. conservation” of the European rabbit will need to be made.

3. WILDSURV News

Below we present a short update about the achievements in the WILDSURV project until now. A more comprehensive presentation of the project was given during the recent 3rd BWDS Symposium.

In the first stage of the project a list of pathogens with their possible wildlife hosts in the different Belgian regions was generated. The pathogens list, corresponding to the “hazard identification” of a classical risk analysis, was based on the new (2008) OIE notification form for wildlife diseases but includes also other pathogens for which a possible release on the Belgian territory cannot be excluded. This list is however not restrictive and more pathogens can be included if necessary. Information about pathogens and their hosts was obtained from a broad literature study which is meant to be continued in the future in order to allow a continuous prioritisation (“dynamic ranking”) of pathogens for surveillance purposes, based on the most recent knowledge. A new database WILDTOOL was developed to store and process the collected data. These data are classified within four “criteria” including “host presence”, “impact”, “transmission characteristics”, and “occurrence” which correspond to the elements of a qualitative risk-evaluation as stated by the OIE Terrestrial Animal Health Code (risk characterisation, release- and exposure assessment). Some of the criteria can be scored directly with Yes / No (host presence, occurrence) but an

optional “second level” scoring will allow the use of more detailed numerical data that are available for these criteria, offering a refined end-result. For the criteria “impact” and “transmission”, scores assigned to “subcriteria” (compilations of data obtained from literature and stored in a checklist) will be resumed to “criteria scores”. WILDTOOL will be put at the disposal of the end-users, being the competent authorities at various departments of the national and regional governments in the areas of public health, animal health, game management, pest control and conservation. The end-users will have the possibility to run queries based on the assignment of a chosen set of “weights” for the subcriteria (according to the specific purposes of the end-user) and on the choice of a specific region and a specific target group. Each query will produce a score for one chosen pathogen or a prioritisation list based on the ranking of scores for multiple pathogens.

A continuation of the data input in WILDTOOL by a team of literature reviewers, as well as the commitment of potential end-users are essential for the future of wildtool after the end of the project in March 2010. Therefore a renewed support at the national or at the international level is indispensable: please contact patav@var.fgov.be or stroe@var.fgov.be

4. Third BWDS Symposium and joint meetings (EWDA/NDOWS; WILDTECH), 14-16 October 2009

On October 16th, 2009, the Belgian Wildlife Disease Society, with the support of the Ministry of Defence and the Ministry of Public Health, and hosted by the military hospital Queen Astrid, organized her bi-annual Symposium about diseases occurring in wildlife. The themes of the previous Symposia in 2005 and 2007 were respectively “Emerging Diseases” and “Wildlife Diseases, Environment and Man”. The theme for this year’s symposium was “Surveillance of Wildlife Diseases”. A number of speakers enlightened us about different aspects of research in wildlife diseases in Belgium and in Europe with emphasis on “surveillance”. Surveillance means very broadly the monitoring of possible disease agents as a component of the prevention of disease outbreaks.

In Belgium, there are several surveillance systems in farm- and companion animals, but wildlife is only sparsely included in these schemes. In Wallonia there is a specialized network that focuses on diseases in hunted animals (Réseau de Surveillance Sanitaire en Faune Sauvage). At the national level, a project called WILDSURV was started in 2008, granted by the Federal Government of Public Health. The objective is to develop a prioritizing system for diseases originating from wildlife which will help to decide which diseases should be monitored. This project runs parallel with similar projects in other European countries, and the current achievements were presented during the BWDS Symposium. New to this third BWDS Symposium was that it was preceded at the same venue by two international meetings on October 14th and 15th. These joint-meetings were organized by the European Wildlife Disease Association (EWDA) and by the partners of the European WILDTECH project and were hosted by the Department Well-Being of the Belgian Ministry of Defence. Experts from all over Europe exchanged expertise and knowledge about surveillance systems in European wildlife.

The EWDA meeting under the heading “NDOWS (National Diseases of Wildlife Schemes)” was meant as a second edition and an update of the highly appreciated meeting that was held in Ciudad Real (Spain) in 2005 on the same subject. The current edition was attended by representatives of 25 European countries who presented and compared their national wildlife disease surveillance schemes.

This three-days event aimed to contribute to the creation of an integrated European surveillance system of wildlife diseases. Regarding the many positive reactions received after the meetings we are confident to conclude that important steps forward have been made towards a better cooperation and integration of surveillance efforts at both the national and the international level.

The BWDS board wants to express its thankfulness to all the Belgian and European speakers and to anybody who cooperated frontstage and backstage to the success of these three days of meetings. The attendants to the 3rd BWDS Symposium will be considered as BWDS members during one year.

Abstracts of the 3rd BWDS Symposium will be put on the BWDS website soon.

(Report: P.Tavernier)

5. Announcements:

1) Opportunity for workshops at EWDA 2010 (2nd call in BWDS Newsletter)

The next EWDA conference will be held from 6 to 10 September 2010 on the island of Vlieland, The Netherlands. We have left Monday 6 September free for people who would like to organize workshops in conjunction with the EWDA conference. At the conference hotel, Hotel Seedyun, which is perched on the dunes overlooking the North Sea, we have reserved six rooms with a capacity ranging from 30 to 112 people. People who are interested in organizing a workshop should apply to Thijs Kuiken (t.kuiken@erasmusmc.nl).

2) Australasian Wildlife Disease Association: annual meeting in New Zealand, 10-16 December 2009

The Australasian Section WDA annual meeting will be held in conjunction with the meeting of the Wildlife Society of the New Zealand Veterinary Association, 10-16 December, 2009. The conference will be held at Woodstock Lodge in the beautiful rolling hill country of The Catlins on the South Island of New Zealand.

The conference is now open for registration and reservation for lodging. Those submitting abstracts for presentations are requested to do so by 30 September 2009.

Forms and additional information are available at: <http://wildlife.massey.ac.nz/meetings/meetings.asp>

A link will be established on the home page of the WDA website.

(Jenny McLelland, Chair, Australasian Section WDA)

3) 2nd International Berlin Bat Meeting : Bat Biology and Infectious Diseases



Dear Colleague,

We are contacting you today with respect to the 2nd Berlin Bat Meeting: Bat Biology and Infectious Diseases to be held from 19-21 February 2010, in Berlin, Germany. Please find the objectives, tentative program and more details on our web page at www.izw-berlin.de. At this point we would like to announce several important news:

REGISTRATION OPEN

The web page is now open for registration. Please register at www.izw-berlin.de (click on English, click on 2nd International Berlin Bat Meeting) as soon as possible because we have only limited capacity for the conference banquet.

PRE-SYMPOSIUM WORKSHOP "CARE AND MEDICAL MANAGEMENT OF CAPTIVE BATS"

We would like to announce a pre-symposium workshop about the "Care and medical management of captive bats". This workshop will focus on three aspects of bat rehabilitation: appropriate care for juvenile bats, rehabilitation of injured bats, and appropriate protective measures against bat diseases for people dealing with captive and/or injured bats. The pre-symposium workshop will be held between 2pm - 5 pm on the 19th of February at the same facilities as the conference. Any participants of the conference may submit an abstract for oral or poster presentation. The program is compiled by Jeroen van der Kooij (Norwegian Zoological Society) and Dr. Kerstin Müller (Small Animal Clinic, Dept. of Veterinary Medicine, Free University of Berlin).

STUDENT TRAVEL GRANTS

Exciting news for undergraduate and graduate student: We offer 7 travel grants for student participants! Each travel grant is for a maximum of 500 € and intended to cover costs of travel and/or accommodation plus registration fee. Travel grants will be awarded on a competitive basis to student participants who submit an abstract for an oral or poster presentation. The nominees will be selected by the scientific committee of the meeting and awards will be announced to the awardees in mid November. Travel costs will be reimbursed at the registration desk of the conference on the 19th of February 2010. Please ask your advisor to write us an email or a letter in which he/she supports your application for a travel grant (applications without accompanying letter of support will not be considered).

PRIZES FOR STUDENT PRESENTATIONS

And even more exciting news: We will run a student competition for the best oral and best poster presentation during the conference. Any undergraduate and graduate student with a first author paper is welcome to sign in. Just make a click during registration that you wish to participate in the student competition. We offer the following book prizes: (a) Kunz & Parsons (2009) Ecological and behavioral Methods for the Study of Bats; (b) Barnard (2009) Bats in Captivity: Biological and Medical Aspects. Come and get it!!!

4) Symposium Monitoring van Zoogdieren, Trends en Technieken . 28 November 2009.

Dit symposium gaat door in het **Provinciehuis te Antwerpen** (België). Op de [website van het Provinciehuis](#) vind je hoe je er kan geraken. Aangezien het symposium niet tijdens de kantooruren plaatsvindt, zal er voldoende plaats zijn om te parkeren op de parking van het Provinciehuis.

- **Volledig programma:**

<http://www.zoogdierenwerkgroep.be/ZWG/website/documenten/zoogdierensymposium.pdf>

- **Inschrijven** is verplicht en kan je doen door **ten laatste op 15 november** een mailtje te sturen naar [Goedele Verbeylen](#) met vermelding van je naam, adres en organisatie. Het inschrijvingsgeld bedraagt 5 euro en kan ter plaatse betaald worden.

- 's Middags en tijdens de pauzes zijn dranken en broodjes, koffiekoeken, soep en taart voorzien (betalend).

Vanaf 9 u wordt het publiek ontvangen en om 9.40 u starten de voordrachten. De voertaal is Nederlands en Engels

5. Invitation for the next General Assembly on October 27th, 2009 in Ghent

The Belgian Wildlife Disease Society is organising its 2nd General Assembly for 2009, including a presentation by an invited speaker. The meeting is planned on **October 27th at 10.00 a.m.**

This meeting is co-organised by Prof. S. Croubels of the Department of Veterinary Toxicology . The invited speaker is Prof. Marcos Perez from the Veterinary Faculty of Cáceres in Spain who will bring us a comprehensive presentation about poisonings in wildlife. The presentation will be in French and English.

Exceptionally this meeting will not take place at the usual location (military hospital in Brussels), but this time we will meet at the **Veterinary Faculty of the Ghent University, more exactly in Auditorium D which you can find completely at the end of the Faculty's central square (Once you have entered by the main entrance, leave the central pond at your left hand and continue to the most distant corner at the right, it is the last but one building)**. We will foresee signposts from the main entrance to the Auditorium

After the meeting those who wish can have a lunch in the Faculty's restaurant.

We invite you warmly for this 2nd BWDS General Assembly, and we're looking forward to meet you there.

The BWDS board