



NEWSLETTER

Summer 2018



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President's Corner



The winter has been harsh in a number of European regions, causing starvation and death in many animals. The spring started abruptly, bringing more sun and warmth than usual for the season but followed by cooler, very wet days. Now the summer has arrived, beginning very hot and dry.

Each time I consciously enjoyed the snowy winter, sunny spring days or hot summer weather, I wondered how wild animals would cope with these ups and downs, and which kind of diseases these meteorological sudden oscillations may trigger, whether on the short or the long term. Likely, we will have more rather than less work in the field of wildlife health in the future – good for the profession, sad for the planet... This underlines again and again the relevance of the collaboration within the EWDA.

Our EWDA committees have been very active over the winter and spring, starting with the new Small Grant Committee, which evaluated applications both for the small research grants and for the conference travel grants. Many thanks to Jacques Godfroid (committee chair) and other committee members (Emmanuelle Gilot-Fromont, Andrew Breed, Gabor Czirjac, Karoly Erdelyi, Tony Sainsbury) for dedicating time to allow the attribution of funds to colleagues.

Another achievement this spring has been the launching of the EWDA WildList. I really hope that it will foster collaborations across disciplines and countries, for the benefit of all involved and for the benefit of wildlife health. I would like to express my gratitude to all colleagues who made it possible, including the former WildTech partners who proposed to transfer the WildList to the EWDA and who managed the original list (Dolores Gavier-Widén, Paul Duff, Staffan Tamm), all EWDA Network Committee members who helped shaping the new list (Becki Lawson, Thijs Kuiken, Antonio Lavazza, Jorge Ramón Lopez, Paul Tavernier), and our EWDA website manager (Rogier Bodewes) who has done an incredible technical work to make it possible for our website to host this Wildlist. Special thanks go to Paul Tavernier, who volunteered to manage the list and has already demonstrated his enthusiasm and efficiency in this task. Last but not least, congratulations to the Student Chapter, which has been very active as ever.

The summer has arrived, and with it we approach the date of the upcoming EWDA biennial conference. I am sure that many of us are excited to go there, to meet good old friends and new colleagues, and to share and hear about the latest news in the wildlife health field in Europe. Over 200 abstracts have been submitted, and the proposed session topics cover a broad range of subjects. Aquatic mammals will be more represented than ever – among workshops, in the scientific programme and in the post-conference excursion – offering a great opportunity to brainstorm about global environmental and health challenges across all wildlife habitats. Our hosts are working hard to ensure that all of us will have a great time, both scientifically and socially speaking. Overall, it sounds like it will be another amazing conference, and I sincerely hope to see many of you there!



Marie-Pierre Ryser

EWDA Chair

FIWI, University of Bern

News from the Board



Spring is here, and it is with some nostalgia that I pen the last 'news from the board' as your secretary. At the EWDA conference in Larissa in Greece a new board will take over. And a new secretary will arrive.

- ★ Voting for board members is now over, we thank all of you for casting your vote. In August, we will see some of our key colleagues leave the board and will bid farewell and give thanks to [Rogier Bodewes](#), who masterfully created our new website and was key in transferring the Wildlist to a new and permanent location, [Lineke Begeman](#), student advisor who was tremendous support to the student chapter through some difficult times, [Károly Erdélyi](#), Eastern Countries Communications officer who was instrumental in setting up opportunities for our colleagues from Eastern Countries, [Miriam Maas](#), member at large who ran the Time and Place committee and was essential in coordinating the upcoming conference with the local organizers. [Lidewij Wiersma](#), newsletter editor who cleverly created a new and more efficient format for the popular EWDA newsletter, and last but not least, [Lisa Yon](#), former secretary and chair extraordinaire who led by example. They will be sorely missed but will also enjoy a well deserved rest and allow for the arrival of new blood and energy !
- ★ During this past year and in particular while preparing for the elections, it became clear that there was the need for some additions and clarifications within the current EWDA bylaws and an initiative to review the existing bylaws and creating a new extended version was lead by our chair, Marie-Pierre Ryser. The result will be sent to you in the next couple of days and we will be soliciting our membership yet again to give feedback and to vote on accepting the new bylaws which will come into effect at the EWDA business meeting in Greece. One of the major keys will be that in the next renewal of your WDA membership, you will need to select the EWDA section to become eligible for EWDA members benefits. This is automatically the case based on your geographic residence, but will be mandatory as an NWDA member or member of any other geographic section. We will make sure that the information is clearly announced ahead of the renewal.
- ★ As the board of the EWDA, we are sometimes asked to give formal statements on important wildlife issues. This was the case in early May, when one of our colleague contacted the board and suggested the EWDA issue a statement on the ban of lead shots. The result of the vote and the final statement can be found page 5.
- ★ The new Conference Attendance Fund, result of the generosity of our dear colleague Vic Simpson, was awarded to three recipients in its first year. Jocelyn Elson-Riggins, Xavier Fernández Aguilar and myself were the very grateful awardees designed by the Small Grants Committee chaired by Jacques Godfroid. If you missed this opportunity, make sure you look for the announcement before the next conference.
- ★ As we head into our next big meeting, a very interesting point of view is shared by our esteemed colleague, Thijs Kuiken, page 8. The issue of sustainable conferences will be discussed within the board in Greece, so if you would like to share your thoughts with us on this important issue, please forward any comments to our new dedicated email: ewda.secretary@gmail.com



Karin Lemberger

EWDA Secretary

*Faupath and Vet Diagnostics,
France*

It has been my honor and pleasure to serve you as secretary for four years, I look forward to new challenges in the future !

EWDA supports ECHA's proposal to restrict the use of lead and its compounds in shot in wetlands



Statement drafted by the EWDA Board, submitted to the membership on May 18th with request for urgent vote. 98% voters in favor. Submitted to the European Chemicals Agency by the EWDA Chair on May 21st.

The European Wildlife Disease Association (EWDA) strongly supports the proposal of the European Chemicals Agency (ECHA) “to restrict the use [and possession] of lead and its compounds in shot (containing lead in concentrations greater than 1% by weight) for shooting with a shotgun within a wetland or where spent gunshot would land within a wetland, including shooting ranges or shooting grounds in wetlands”.

The EWDA is an international scientific society of wildlife professionals, including veterinarians, epidemiologists, biologists, ecologists, research scientists and other individuals involved with wildlife diseases and related disciplines, promoting research, management, education, communication, consultation and collaboration. The mission of the EWDA is to acquire, disseminate, and apply knowledge of the health and diseases of wild animals in relation to their biology, conservation, and interactions with humans and domestic animals.

Lead has acute and chronic detrimental effects on living organisms. The use of lead gunshot in wetlands, including its deposition in the environment (where it persists and accumulates), results in various health risks all over Europe: primary intoxication of waterbirds following ingestion; secondary intoxication of predatory or scavenging species; exposure of humans consuming waterbird meat (knowing that any level of lead exposure is potentially health-threatening); and contamination of the environment, including groundwater. Current regulations within Member States of the European Union (EU) vary from a total ban of lead gunshot to no regulation at all. This is problematic because the flyways of migratory birds cross several Member States and a lack of consistent regulations throughout the bird habitat range prevents the effective implementation of measures relevant to animal and human health.

Disease management is particularly challenging in free-living wildlife populations. As an exception, lead intoxication is a problem that could easily be solved if appropriate regulation existed. Although the impact of lead gunshot on wildlife health is difficult to quantify, it is considered significant. Furthermore, safety of meat originating from hunted wildlife is an issue of increasing importance for public health, and for this issue not only infectious agents but also sublethal toxic compounds (such as lead contained in the tissues of hunted animals) have to be taken into consideration. From an economic point of view, in addition to the acute and chronic detrimental effects to living organisms, soil and water contamination, non-negligible efforts and funds are invested in surveillance, research and wildlife rehabilitation related to lead intoxication. Last but not least, in an era where the importance of sustainable habitats and environmental health to human health is widely recognized, society increasingly expects a move towards a more respectful way of dealing with the environment, decreasing pollution, and intensified efforts for wildlife conservation.

In view of: lead's proven toxicity to waterbirds, other animals and humans; the current lack of harmonization of regulations regarding lead gunshot among EU Member States; the current lack of risk management of lead gunshot at the EU level; and the availability of alternative gunshot compounds considered to be safe and affordable, the EWDA strongly supports ECHA's proposal, including an implementation of this restriction within a short timescale. This timeline seems reasonable, given that a number of EU Member States already have some form of regulation on lead in wetlands, although those regulations are often insufficient.

The EWDA shares the opinion of the ECHA's Committees for Socioeconomic Analysis (SEAC) and for Risk Assessment (RAC), that a total ban of lead gunshot or a ban of lead gunshot for its use in hunting in all ecosystems could be more effective than the proposed restriction, because: it would be beneficial to all wildlife in all habitats; it would be easier to implement (same regulations everywhere within a country and compliance would not fall upon individual shooters but on the producers and retailers of lead gunshot); and because it would likely result in greater compliance than a targeted restriction on the use in wetlands. As stated by the two Committees, this would go beyond the topic of the current mandate attributed to ECHA by the European Commission. However, the EWDA hopes that this first initiative will be followed by others aiming at a wider restriction of lead use, including in terrestrial habitats. Lead poisoning remains a frequent problem in other species than waterbirds, including but not limited to protected birds such as endangered vultures and eagles that consume lead contaminated carcasses.



13th EWDA Conference August 27 - 31, 2018 Larissa, Thessaly, Greece

Dear colleagues,

Less than 3 months are left for the 13th EWDA Conference “**Wildlife health and conservation: expectations in a challenging era**”. Preparations are on the peak, as well as our excitement to meet you in person this summer.

In case you haven't noticed yet, there have been some additions to our website to help you navigate easier. Traveling information have been gathered in one button to spot it at once. [Tentative Program](#) is announced to help you focus to your priorities. Our [Facebook Page](#) is also utterly and regularly updated, so you can follow it, not to miss any of our news.



Monk seal, Alonissos Island

Numerous **abstracts** for oral and poster presentations were submitted on various topics. Many of them were novel and interesting enough, to make us anticipate for the conference to commence.

Early registration was extended until the 5th of June to give the opportunity to as more of you possible get advantage of the lower prices.

EWDA used the Vic Simpson fund to provide **attendance grants** to help scientists attend our conference, and we also gave a similar grant to students.



Meteora

EWDA **Auction** will take place on Thursday 30th of August. The auction is an important fundraiser for the EWDA student chapter and it is a great opportunity to show students our support, while at the same time have a funny and lively evening to remember! So, do not forget to bring with you a relevant good quality item with a wildlife theme suitable for auction!

Students, ECZM delegates and EWDA Network Surveillance members will start their meetings on Sunday 26th of August. If you wish to meet and mingle with them, adjust your trip to an earlier arrival. Workshops will be held on Monday, and there are still some spaces left for you to register. I strongly recommend all of you who have not registered for our Conference and the post conference tour yet, to do so, because we aim to offer a high quality scientific event along with an adventurous social program. Of course, our **invited speakers** might be your motive to attend the 13th EWDA Conf. as Professor Herve Zeller, Dr Ruth Cromie and Dr Laskarina-Maria Korou have serious reasons to attract our interest.



Charalambos Billinis
Professor
Faculty of
Veterinary Medicine
University of Thessaly

We are really excited working on how to make the conference an unforgettable experience... But that will only happen if you will be there with us. Looking forward to meeting you in the 13th EWDA Conference, August 27-31, Larissa, Greece.

Pre-Conference Student Event



This year, for the first time, the EWDA Conference will be preceded by a day especially for students! This day, students will have the opportunity to get to know each other and connect with leading scientists before the conference starts.



This day is for you if you want to:

- Learn more about the current research within wildlife disease and conservation

- Meet up with wildlife professionals and get a change to ask questions about research/career/master programmes/ how they got there etc. etc.

- Learn what the heck GIS is and how it is used

- meet new friends and expand your professional network

- go to Greece

- have a great time!



✉ EWDAstudent@gmail.com
📍 EWDAstudent.wordpress.com

For more information and registration, please visit the website ewdastudent.wordpress.com, or send us an email: ewdastudent@gmail.com. We are looking forward to see many of you in Greece!

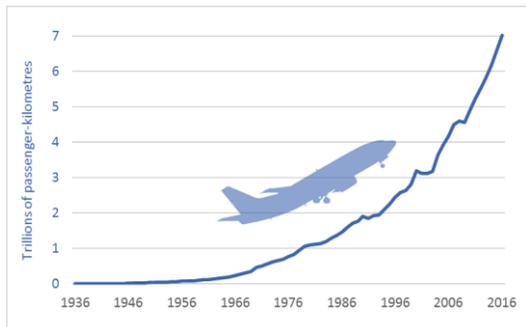


Anna, Rebecca, Eirini, Manon & Anne-Fleur

The EWDA Student Chapter Board

Reducing EWDA's ecological footprint

The impact of human beings on our planet has increased tremendously in the past century, and will continue to increase in coming decades, as both the global human population and per capita consumption continues to grow. One of our greatest challenges of our time is to bring this human impact under control, and make a transition to a sustainable society.



Global passenger air travel, 1936 to 2016
(www.darrinqualman.com; source: Airlines for America: Annual results world airlines)

As part of this sustainability transition, the governments of all EU countries pledged at the 2015 Climate Accord in Paris to reduce the output of greenhouse gases in 2030 by at least 40% compared to 1990, to keep global warming under 2 degrees Celsius. However, governments cannot do this alone. It requires all of human society, including governments, individuals, businesses, and associations, to work towards this goal. As an association of individuals who are knowledgeable about wildlife health and often committed to wildlife conservation, the EWDA also has a role to play.

The Intergovernmental Panel on Climate Change estimated in 1990 that aviation was responsible for around 3.5% of anthropogenic climate change, a figure which includes both CO₂ and non-CO₂ induced effects. Air travel has increased rapidly since then (Figure), and its effect on climate change could grow to 5% of the total contribution by 2050 if action is not taken to tackle these effects.

In my view, the main impact of the EWDA is the travel of its members to and from biennial conferences. Multiplication of each long-distance trip by the 200-odd participants to an EWDA conference makes for a gigantic CO₂ cloud. Yet we do not talk about this in our discussions about EWDA conferences. We speak about the number of people who participated, about the quality of the oral presentations and posters, about the interesting discussions and the enjoyable social outings. We share our concerns about the impact of deforestation, poaching, industrial farming, and other human activities on wildlife health. However, our own ecological footprint from organizing a EWDA conference is rarely mentioned.

I am not saying that we should stop having EWDA conferences. By meeting each other in person, we learn things we would not just by reading scientific articles, we set up international collaborative research, and make lifelong friends. However, I wonder whether it is possible to retain the benefits of an EWDA conference while reducing its ecological impact. For example: Do we need to have conferences every two years? If we had them every three years, we would reduce our ecological impact by one-third, just like that. Should we invite keynote speakers from afar, who give their presentation and leave soon afterwards? Instead, what are the possibilities for having them give their talk by video or even avatar? Can we base the choice of location for the EWDA conference on the lowest cumulative environmental cost of travel, while at the same time ensuring that all EWDA members have an equal opportunity to organize the scientific part of the conference? Is it possible to negotiate cheaper rates for travel to the EWDA conference by environmentally friendly means, like bus or train? Sort of like car pooling, but on a bigger scale.

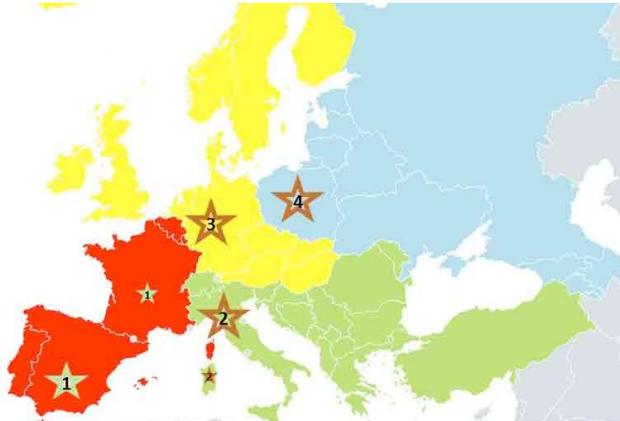
No doubt that EWDA members have many good ideas about how to reduce the ecological impact of EWDA conferences. The first step is to put it on the agenda, and to talk about it.



Thijs Kuiken. Professor of Comparative Pathology
Erasmus MC Rotterdam

Release of a model to collect data on wild boar distribution and abundance across Europe: the need for data standards

The Consortium ENETWILD (www.enetwild.com), which is focusing on the collection of wild boar abundance and occurrence data for the analysis of the risk factors of African Swine Fever (ASF) spread for the European Food Safety Authority (EFSA), released a normalized wild boar data model (WBDM) to populate a common database.



Distribution of the European countries among the ENETWILD regional partners for data collection and quality assessment. These regional groups will perform active data collection and provide support to collaborators.

The data requested refer to wild boar (i) hunting statistics, (ii) density and (iii) occurrence, including absence data. As the same data can be used for more than one purpose (e.g. hunting statistics can be used to estimate occurrence data), for each type of data, ENETWILD recommends filling only one data model, which must be the most informative one.

Absence data are also of particular importance in this project and should be reported, but must be associated with a sampling effort. Absences will be recorded in the occurrence model. The WBDM is accompanied by a Data Sharing Agreement which must be signed by the data owner, in person or by a legal representative. More info and detailed instructions to fill and submit the data are available at:

<http://www.enetwild.com/2018/04/25/release-model-collect-data-on-wild-boar-distribution-and-abundance-europe/>

The time span of interest to the project is from 2014 (hunting season 2014-2015) onwards, and data collection will be a continuous activity for the next years.

The WBDM, which is composed of a list of fields to be recorded, including data and metadata, is intended to be filled by data providers representing all European regions and Countries. ENETWILD defined the data requested in this model and their technical specifications to offer a common frame to insert them; i.e. what we call the STANDARDS. These standards are essential in order to harmonize the way similar data coming from different sources is recorded and will assure wild boar data are correctly collected, shared; and finally used.

How to download WBDM forms



The WBDM Structure



WBDM for Data Occurrence



WBDM for Hunting Bags

Video tutorials for the different data models can be seen at [enetwild.com](http://www.enetwild.com)



Joaquín Vicente
Senior Researcher

IREC-UCLM



The new WildList



EWDA WildList open for registration!

Are you involved or interested in wildlife health in Europe? You are kindly invited to visit the website (www.ewda.org) of the European Wildlife Disease Association and to register on the WildList!

The WildList is a list of people involved or interested in wildlife health in Europe, including their expertise and contact information. The objective of the WildList is to offer a tool to find specific contacts, and to facilitate mutual consulting and cooperation. People involved or interested in any discipline related to wildlife health are welcome. The early WildList was created 2008 within the EU [MED-VET-NET network](#), and was subsequently hosted by the WILDTECH project. Recently (April 2018) it was transferred to the EWDA website in concertation between the former WildList managers and the EWDA website responsible Rogier Bodewes, with the aim to revive and actualize the list. The new WildList is now managed by the EWDA Committee for Wildlife Health Surveillance in Europe.

Name
Country
Email
Institution
Position
Field and degree of education
Expertise/interest in wildlife diseases
Expertise/interest in wildlife species
Expertise/interest in other wildlife related topics
URL of institution
Phone number (invisible)
EWDA member (invisible)

To view the WildList, go to <http://ewda.org>, and choose “EWDA Network” from the menu bar, sub-choice “WildList”. The information contained in the WildList can be consulted by using the “search” field in which you can search on any word referring to the contents of the specific fields (*cf. textbox at the left*). Note that for privacy reasons, phone numbers and EWDA membership information have been made invisible on the website. For the mail addresses visible in the WildList, we are working out a solution to allow sending a mail, while protecting the E-mail adress for improper use.

Together with the transfer of the WildList to the EWDA website, the number and choice of the specific fields was reviewed. A particular challenge was the new European GDPR (General Data Protection Regulation), in force from May 25th, 2018. In order to meet the requirements, a privacy statement has been included in the WildList **registration form** (menu choice “EWDA Network”, sub-choice “WildList registration form”). Using this form, anybody wanting to figure on the list can subscribe (EWDA members are accepted by default, non-EWDA members are evaluated by the Committee), or can update personal information at any time. A **messages form** (link in introductory text above the visible WildList) allows members to share information such as announcement of meetings, job advertisements a.o. (forwarded to WildList members by the moderator) and to cancel their subscription if wanted.

The renewed WildList was launched in April 2018. A call for registration was sent out through the Google network, while those figuring already on the list were asked by mail to update their information. Even if your profile has not changed too much, we kindly ask you to use the registration form to confirm your choice to be on the WildList. Invalid mail addresses and non-responders will gradually be removed. As the moderator of the renewed WildList, I am happy to tell you the response is successful: already 90 people sent an update, or their registration as new WildList members. At the moment of writing we count 292 subscribers. ***If you would like to be on the WildList, do not hesitate to register. Thank you for helping to connect wildlife health experts all over Europe !***



Paul Tavernier
WILDPAD

News from the North-I compiled

by Jonas Malmsten, Swedish University of Agricultural Sciences, Umeå, Sweden



CWD surveillance in Sweden, AI, Salmonella, and a new report

In Sweden chronic wasting disease surveillance, so far primarily based on fallen wildlife, is ongoing. At present 384 moose, red deer and roe deer have been tested, all negative. The HPAI (H5N6) outbreak in wild birds is still ongoing in the south-eastern, coastal area of the country. During 2018, ten white tailed eagles, two buzzards and one goshawk out of 201 tested birds have been positive for H5N6. One interesting finding was the remains of five white tailed eagles found in a small area next to a lake in Skåne province where it was possible to detect H5N6 in the three best preserved bodies. In late 2017 there were several outbreaks of paramyxovirus infections amongst rock doves on the Baltic island of Gotland but fortunately this didn't spread to poultry. In the beginning of 2018 we have seen unusually high numbers of passerines, mainly redpolls and bullfinches from the central parts of Sweden with Salmonella Typhimurium infections. This spilled over to outdoor cats which has resulted in approximately 1200 positive cat samples so far and a small number of positive human cases, mostly children.

The Swedish annual Wildlife Disease Surveillance Report for 2017 is published on the home page of the National Veterinary Institute and will soon be available in English at <http://www.sva.se/en/animal-health/wildlife>.

Submitted by Henrik Uhlhorn, Dept. of Pathology and Wildlife Diseases, National Veterinary Institute, Uppsala Sweden



Surveillance programme for CWD in cervids in Norway, released recently

https://www.vetinst.no/overvaking/chronic-wasting-disease-vilt-cwd/_/attachment/download/849c5ee2-cda9-4483-a4bd-768b64863ada:5d7b67f64cbee0b20ae18b2de0c7e3778aa4ed1d/2018_OK_CWD%202017.pdf

From Jørn Våge, Norwegian Veterinary Institute, Oslo, Norway



Veterinærinstituttet
National Veterinary Institute



EWDA BULLETIN

News from the North-II



Avian influenza in birds on Svalbard

Avian influenza (AIV) antibodies (n = 25; 28% prevalence) have been detected in breeding black-legged kittiwakes (*Rissa tridactyla*) sampled in Ny-Ålesund, Svalbard in 2015. To our knowledge this is the first time AIV has been detected on Svalbard.

This is unpublished data: authors: Megan Lee (NTNU), Veerle Jaspers (NTNU), Geir Wing Gabrielsen (Norwegian Polar Institute-Tromsø, Norway), Courtney Waugh (NTNU)

NTNU-Norwegian University of Science and Technology, Trondheim.



Photo: Megan Lee

MOOSE FROM FINLAND WITH CHRONIC WASTING DISEASE?

From www.evira.fi

Shortened version of the web article:

Chronic wasting disease (CWD) has been found in a moose (*Alces alces*) for the first time ever in Finland. The disease was diagnosed in Kuhmo in a 15-year old moose that had died naturally. The results of the analyses carried out by Finnish Food Safety Authority Evira have been verified by a EU reference laboratory.

Norway was before this case the only European country where CWD has been diagnosed. The monitoring of the occurrence of the disease was intensified from the beginning of 2018 in Finland and five other EU Member States.

In Finland, the occurrence of the disease has been studied already since 2003. None of the ca. 2 500 samples analysed so far had tested positive for the disease. The monitoring of the disease will now be further intensified in the Kuhmo and Kainuu region. Hunters are going to be provided with more instructions before the start of the next hunting season, if appropriate.

The chronic wasting disease is not known to have been contracted by people. Moose meat is safe to eat and no restrictions are imposed on the sales and exportation of meat of animals of the deer family. As a precautionary measure the export of live animals of the deer family to other countries will be discontinued for now.

The disease is common in North America. The moose found in Kuhmo did not suffer from the North American, highly contagious form of the chronic wasting disease. The disease seems to resemble most the form of cervid TSE diagnosed in Norway, which appears to be found incidentally in individual animals of the deer family.



20th anniversary of the FIWI at the University of Bern



The Centre for Fish and Wildlife Health (FIWI) at the University of Bern celebrates its 20th anniversary! 2018 is also the 60th year of documented wildlife necropsies at this institution.

Wildlife health investigations at the University of Bern date back to 1956, when the Division for Poultry, Game and Fish Diseases was founded within the Institute of Veterinary Bacteriology. The first necropsy report available in the archive was written in 1958. Since then, this division has undergone a number of structural changes, a decisive one being the foundation of the FIWI in 1998. Subsequently, the FIWI progressively developed from a small division within the Institute of Animal Pathology towards an independent institute within the Department of Infectious Diseases and Pathobiology of the Vetsuisse Faculty Bern, a significant change of status that officially occurred in January 2014.

The mandate of the FIWI (including two groups: Fish and Wildlife) is to act as a national competence centre for diseases of free-living and captive fish and wildlife (the latter being understood as wild animals other than fish and invertebrate aquatic organisms). This includes four main activities:

- (1) accredited diagnostics of diseases;
- (2) research on infectious and non-infectious diseases;
- (3) consulting for governmental agencies, nongovernmental organizations and private persons;
- (4) academic training of under and postgraduate students and early stage researchers, as well as the continuing education of practitioners, public authorities and other stakeholders.

As concerns the Wildlife Group in particular, the basic mandate has remained the same for at least two decades but the number of investigated diagnostic cases has doubled, the number of analysed species has increased, and the specific tasks have progressively covered a larger spectrum of activities, such as support of wildlife captures, contributions to hunters' education in wild meat hygiene, targeted investigations of important livestock pathogens in wild populations, and forensic expertise. Additionally, diagnostic activities have become officially part of the early warning system of the federal veterinary authorities.



Ryser-Degiorgis M.-P., Segner H. 2015. National competence center for wildlife diseases in Switzerland: mandate, development and current strategies. *Schweizer Archiv für Tierheilkunde*, 157: 255-266.

Pewsner M., Origgi F. C., Frey J., Ryser-Degiorgis M.-P. 2017. Assessing fifty years of general health surveillance of roe deer in Switzerland: A retrospective analysis of necropsy reports. *PLoS ONE* 12(1): e0170338, 28 pp.

Akdesir A., Origgi F. C., Wimmershoff J., Frey J., Frey C., Ryser-Degiorgis M.-P. Causes of mortality and morbidity in free-ranging mustelids in Switzerland: necropsy data from over 50 years of general health surveillance. *BMC Veterinary Research* 14:195, .19 pp.

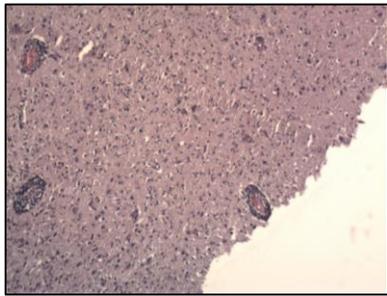
Meier R., Ryser-Degiorgis M.-P. 2018. Wild boar and infectious diseases: evaluation of the current risk to human and domestic animal health in Switzerland: A review. *Schweizer Archiv für Tierheilkunde* 160: 443-460.

Marie-Pierre Ryser
Head of the Wildlife Group
FIWI, University of Bern

Re-emergence of canine distemper in wildlife in Belgium



Canine Distemper Virus (CDV) is broadly documented for its important impact on wild carnivores populations and conservation. In Belgium, hundreds of wild carnivores, such as red foxes (*Vulpes vulpes*), raccoons (*Procyon lotor*), European badgers (*Meles meles*) and smaller mustelids are submitted each year to the Surveillance Network of Wildlife Diseases (Faculty of Veterinary Medicine – University of Liege, Belgium) for *postmortem* examination (R. Volpe) and analysis, involving a PCR-based screening for CDV on brain, respiratory and gut tissues (M.M. Garigliany - Dpt of Pathology, Faculty of Veterinary Medicine – University of Liege, Belgium)



Pict1: Perivascular inflammatory cell infiltrates in hematoxylin & eosin stained brain tissue (fox, 100x Magnification)

From the beginning of November 2017 to late May 2018, a total of 146 carnivores (114 red foxes, 22 badgers et 10 raccoons) were submitted for *postmortem* examination. At this day (31/05/2018), thirty one animals have been tested by real time PCR for CDV RNA (28 foxes, 2 badgers and 1 raccoon), twenty-two of them were tested positive, among which 19 foxes, 2 badgers and 1 raccoon with a history of abnormal behaviour or collapse and so were euthanized for ethical reasons. Geographically, most of the CDV-positive animals originated from within a 15 km radius around Liege. Histopathological analysis of the brains revealed mild to severe lesions of (meningo)encephalitis (pict1).

As published in Vet Rec (April, 2018), the possible circulation of a vaccine strain was excluded by conventional RT-PCR followed by sequencing. This revealing the circulation of a wild-type strain. In conclusion, the current outbreak, concentrated over a small geographical area, with a high mortality in red foxes (overall), is highly suggestive of a re-emergence of CDV in a naive population. A surveillance programme in neighbouring areas has been initiated.



Mutien-Marie GARIGLIANY

DMV, PhD, Professor (Dpt of Pathology, Faculty of Veterinary Medicine, University of Liege, Belgium)



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Scarlet Macaw Program Guatemala



This previous months I volunteered with the Wildlife Conservation Society and worked in their Scarlet Macaw Program in Guatemala. It is fairly known that the Mesoamerican sub-species of Scarlet Macaws (*Ara macao cyanoptera*) is highly threatened by habitat loss, deforestation and poaching. Human-caused forest fires and cattle ranching have drastically fragmented and reduced the total population to less than 1,000 individuals, distributed across southern Mexico, Belize and Guatemala. The WCS estimates that only 250 scarlet macaws remain within Guatemala's Maya Biosphere Reserve (MBR), the largest protected area complex in Central America and key nesting site of *A. m. cyanoptera*.



Feeding macaw chicks at the field laboratory

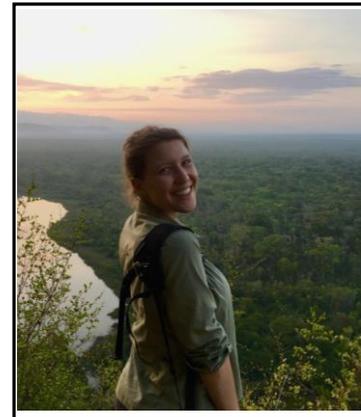
The research camp is based in the heart of the jungle of Petén, northern Guatemala. During the breeding season from April to July, the biggest goal of WCS is to maximize the natural reproduction of scarlet macaws. By hanging up artificial nests in the regular nesting sites of the birds, they try to increase the availability of nesting cavities. Furthermore, old nesting sites have to be checked and cleared from Africanized bees' infestation, since these bees are fervent competitors for nesting cavities and can kill young macaw chicks. We also did physical examinations of wild chicks to determine a health status of the scarlet macaw population in the western region of the MBR.



Ara macao cyanoptera in leaving its nest at Laguna del Tigre, Petén Guatemala.



In addition, injured or third chicks, since they are usually in disadvantage to compete for food with their older siblings, are taken from their nest to be hand raised at the field laboratory. It is impressive to see how fast they grow and learn. After about 50 days, before the chicks are able to fly, they are placed back into foster nests in the wild. So far, the program has been very successful. While I was there, we monitored 26 active nests, hand raised nine macaw chicks and did 18 health check ups. I had an amazing experience in the Mayan jungle of Guatemala and it was a great opportunity to experience wildlife conservation first hand with all struggles, challenges and tough conditions. If you like more information about the project or are interested in volunteering with WCS, contact Luis Fernando Guerra (lguerra@wcs.org) or hannah@nepadawild.life.



Hannah Emde

Nepada Wildlife e.V.

Vet Student from Germany

Wildlife Population Health: A resident's perspective



I'm the current (and first) Wildlife Population Health (WPH) resident at the Institute of Zoology, Zoological Society of London (ZSL) and the Royal Veterinary College (RVC), University of London, United Kingdom. This is a 3-year training programme, approved by the European College of Zoological Medicine (ECZM, <https://www.eczm.eu/>), and I'm in my final year.



*Western European hedgehog (*Erinaceus europaeus*) survey*

Wildlife Population Health has only existed as a European veterinary speciality since 2009 and the first residency began in 2014, so everything is still quite new. There are currently eight residents based in Croatia, Germany, Switzerland and United Kingdom. All are training to one day obtain the title "European Veterinary Specialist in Wildlife Population Health". To be awarded the Diplomate qualification, you have to complete a residency, publish two peer-reviewed papers, submit a case and activity log and pass the ECZM board examination... My approach is "one step at a time".

I have found my residency to be a great mix of obtaining new knowledge and, more importantly, learning new skills.



*Pool frog (*Pelophylax lessonae*) health examination fieldwork*

The programme I'm doing includes a Master of Veterinary Medicine (MVetMed) which has given me the opportunity to take all modules of the MSc in Wild Animal Health (another ZSL/RVC jointly run post-graduate course) as well as other modules in epidemiology, pathology, scientific writing and teaching. In addition, I've conducted independent molecular diagnostics research in the laboratory, disease investigation in free-living wildlife from tadpoles to moose, and gained a range of fieldwork experiences.

Whilst the WPH residency programmes vary in structure between host institutions, the residents meet once a year at a summer school and have regular Skype-based journal clubs and mentored tutorials, so there is a growing community of students who are sharing the training experience.

I often say that "specialising in WPH is actually the opposite of specialising". Instead of gaining "all" knowledge on a particular topic you gain a broad understanding across a discipline. But that's what makes WPH so interesting and exciting! My residency has confirmed what I already suspected before starting it: 1) Wildlife is fascinating, 2) there are so many ways to work in wildlife health, 3) lab work is actually pretty cool, 4) I love fieldwork, and 5) I want to do even more research after my residency ends.

What's next? I hope to find a PhD with a fieldwork component somewhere in Europe studying diseases in free-living wildlife.

I look forward to meet many of you at the EWDA Conference in August!



Helle Bernstorff Hydeskov

ECZM Resident in Wildlife Population Health

Zoological Society of

London/Royal Veterinary College

<https://www.zsl.org/science/users/helle-hydeskov>

Student Chapter AUSTRIA - Report



We were happy to have 4 veterinarians, with different areas of expertise within the field of wildlife population health, in Vienna for our lecture event. A total of 90 students and faculty members joined us for the event. This time, attendees from many different places travelled to Vienna to attend the lecture event and/or the field trip, such as from the Czech Republic, Slovakia, Hungary, Italy, France, Belgium, Germany, Russia, Vietnam and India.

The poster for the 'Wildlife Population Health and Pathology' event features a night scene of a tented camp under a starry sky. At the top left is the EWDA logo and 'Student Chapter Austria'. The title 'WILDLIFE POPULATION HEALTH AND PATHOLOGY' is in bold white letters, with 'Current Research and Fieldwork' below it. A schedule of events is listed on the left side, and the location and date are at the bottom. A small logo for AVE is in the bottom right corner.

18:00 Welcome and Introduction to the EWDA
18:15 Snake Pathology - A Long and Neverending Story
Dr.med.vet. Eva Dervas, Resident ECVP
Institute for Veterinary Pathology, Vetsuisse Faculty Zürich
19:00 Marine Mammal Research and Anatomy
Anja Reckendorf, Veterinarian, PhD Candidate, Resident ECZM
Institute for Terrestrial and Aquatic Wildlife Research,
University of Veterinary Medicine Hannover
20:00 Images of Africa: Research, Conservation and Photography
Andrei D.Mihalca, DVM, MSc, PhD, Dipl.ECZM, Associate Professor
Gianluca D'Amico, DVM, MSc, PhD
Parasitology and Parasitic Diseases Department,
Faculty of Veterinary Medicine, Cluj-Napoca

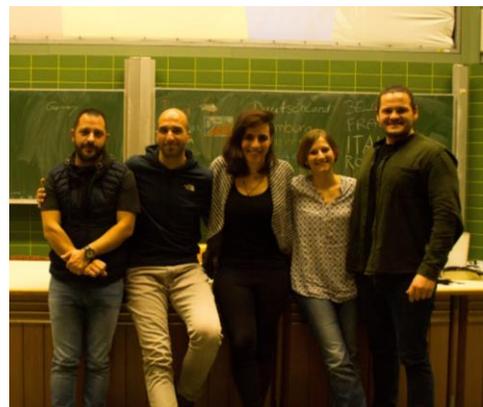
When Thursday, April 5th 2018
Where Hörsaal C, Vetmeduni Vienna, Veterinärplatz 1, 1210 Vienna

photo by
Diana Birau
AVE
Association
of
Veterinarians
in
Europe

After an introduction to the event and the European Wildlife Disease Association's members, aims and activities, Dr. Eva Dervas from the Institute of Veterinary Pathology in Zurich, who is currently doing a pathology residency with an emphasis on wildlife pathology, held a presentation about snake pathology. She discussed clinical, gross and histological findings and diagnostic options regarding the Boid Inclusion Body Disease (BIBD), which affects solely constrictor snakes (boas and pythons). Her second topic was nidovirus-infections in pythons, which leads to a progressive proliferative, and often fatal pneumonia, with a marked concurrent accumulation of mucus in the respiratory tract. Furthermore her presentation covered topics from snake anatomy, necropsy histopathology and various sampling methods (ante and post mortem) as well as the "everyday life" of a veterinary pathologist.

Meanwhile snacks and drinks, organized by our helping hands from AVE and spontaneously sponsored by our universities' office for international relations, were available to contribute to a casual

but not less professional networking opportunity for the students and lecturers, between the presentations. Anja Reckendorf, a PhD candidate and resident for wildlife population health at the Institute for Terrestrial and Aquatic Wildlife Research of the TiHo Hannover, continued with an overview over many exciting aspects of marine mammal research, including taxonomy, anatomy, conservation, research, fieldwork as well as pathology. Especially anthropogenic threats such as plastic and chemical pollution, ship strikes and entanglements were discussed. "Bioacoustics and the marine environment" – underwater noise pollution significantly alters marine mammal behaviour. She talked about mitigation measures that can help minimize these effects by for example using less loud procedures, switching to times and areas of low abundance or muffling the noise with air bubble curtains. Additionally, modern research gives opportunities for new non- or minimally invasive research methods – "whale-poop-sniffing research dogs", the use of drones and different kinds of tags and their pros and cons were discussed.



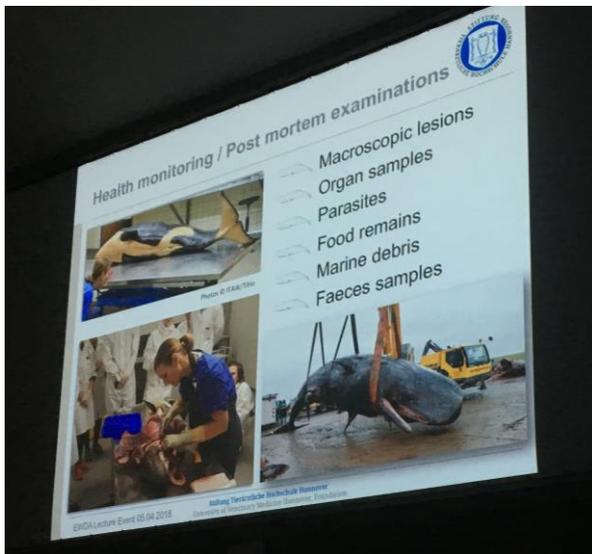
Andi Mihalca, Gianluca D'Amico, Eva Dervas, Anja Reckendorf and Julian Keleş

WILDLIFE POPULATION HEALTH AND PATHOLOGY



The audience was very enthusiastic, bombarding Anja with questions about various marine mammal topics. Prof. Andrei Mihalca and his colleague Gianluca D'Amico, both teaching at the department for parasitological diseases at the faculty of Veterinary Medicine in Cluj-Napoca, completed the evening with a picturesque lecture on research and conservation efforts in Africa with a focus on fieldwork and logistics behind it. Their subject of interest – vector borne diseases – gives them the opportunity to work with all animal species alike. From forest elephants and gorillas to camels, antelopes, birds and all sorts of carnivores including domestic ones.

Apart from the research aspects, students enjoyed listening to the do's and don'ts, success and failure during fieldwork and how strenuous the adventurous travels to and from the research sites can be. Next to their "tales from the field", their stunning photography, which has recently been featured on Africa geographic, were the cherries on the top for our audience.



Marine mammal lecture

Attendees used their "spare Friday" to visit the city of Vienna, the Zoo Schönbrunn and/or a traditional Austrian "Heuriger" around the surrounding countryside. Our local wildlife veterinarian Johanna Painer, from the Research Institute of Wildlife Ecology, gave our invited speakers a tour around the institute and discussed their current research with eg. captive wild boars (*sus scrofa*), red deer (*cervus elaphus*) and edible dormice (*glis glis*).

On April 7th we started the 4th ornithological fieldtrip with our guide Prof. Loupal. This time we chose the National park "Neusiedlersee – Seewinkel" as our destination.

After a one hour drive, we arrived at "Lange Lacke",

which is with up to 10km² the biggest out of around fourty small, salt containing and solely rainwater-fed lakes of the national park. They are of great importance as bio-reserves for all kinds of animals and Plants as well as resting places for migrating birds.

Before starting our ornithological tour, Anja Reckendorf gave a short introduction to seal parasites, showed us specimen of the seal louse (*Echinophthirius horridus*) and it's heart worm (*Acanthoceilonema spirocauda*) as well as a handout for more details.

The participants enjoyed the 3,5h birdwatching trip with our passionate guide. Various binoculars, telescopes and photography equipment were dominating the gravel road.

During lunch at a nice traditional Restaurant in Illmitz, Andi Mihalca and Gianluca D'Amico were happy to discuss further parasitological topics and one of the current human wildlife conflicts – exemplary for Europe: wolves in Romania – with the participants. Meanwhile one or the other might have realized they caught a bit of an unexpected sunburn.



Sinan Julian Keleş

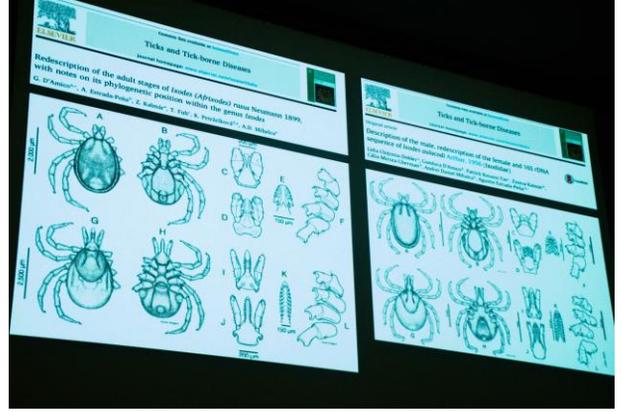
Student Chapter AUSTRIA

Representative

Lecture Event and Fieldtrip



Audience in the lecture hall



Tick taxonomy

These events were fully successful, giving students insight into wildlife topics rather far away from the universities' daily routine and connecting people from all around the world.

We are looking forward to seeing you as lecturer or attendee at our next EWDA Student Chapter AUSTRIA – Lecture Event. (Save the date: October 4th 2018)

Best wishes from Vienna,
Julian Keleş



Visiting the red deer research enclosure



Ornithological fieldtrip guided by Prof. Loupal



Snake pathology lecture



This is the last newsletter that we edited. We hope you enjoyed reading and would like to thank all contributors of the newsletters of the past few years for their contributions, and wish the new newsletter editors all the best!

Disclaimer

The editors have tried to put this non-citable bulletin together as carefully as possible, we apologize for any errors or omissions that we may have committed.

Acknowledgements

We would like to thank all the contributors for their articles and their enthusiasm.

Winter Newsletter Deadline 1st of December 2018

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