SCIENTIFIC PROGRAMME

2018 Joint EAZWV/AAZV/Leibniz-IZW Conference

October 6 - 12 Prague, Czech Republic

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PRAGUE ZOO

Welcome!

Welcome to the 2018 Joint EAZWV/AAZV/Leibniz-IZW Zoo and Wildlife Health Conference in Prague. It is a great honour for us to be able to welcome top professionals from around the world here in the capital of the Czech Republic, and that Prague Zoo could also contribute a small part to the organization of this meeting.

When I was pondering over how to introduce our zoo to you, I decided to confine myself to just a few basic facts and to use the remaining space to talk about someone whose story, I think, may be meaningful to you.

Prague Zoo's logo has five stylized animal footprints:

The yellow lion footprint reminds us of one of the first animals at Prague Zoo - Šárka the lioness. She was seen by the first visitors to our zoo - or more precisely its construction site - on September 28th, 1931. The lion's footprint also symbolizes the popularity of the animal personalities and the popularity of the zoo. It is currently visited by more than 1.4 million visitors each year.

The red bird footprint draws attention to Prague Zoo's globally important breeding successes, such as the first hatching of an Andean condor in 1937.

As for significant breeding in recent years, I would like to mention, Asian elephants, aardvarks, giant anteaters, Malayan tigers, Malayan tapirs, Javan gibbons, palm cockatoos, Javan green magpies, Komodo dragons or crowned river turtles.

The orange footprint of the Przewalski's horse emphasizes Prague Zoo's contribution to the rescue of this species, as well as the protection of many other endangered animals. We keep the World Stud Book for Przewalski's horses and every year, in cooperation with the Czech Army, we carry out an air transport to the Mongolian Gobi. Of the other projects I would like to mention, there is the Wandering Bus, which promotes environmental education in Cameroon, or the fact that we have been entrusted with the management of 13 European or international studbooks and three EAZA EEP breeding programmes.

The blue footprint of the Komodo dragon symbolizes the zoo's development in the aftermath of the major floods that hit in 2002 and 2013, and the rise in its importance at an international level. For that matter, our Komodo dragon breeding has attained world renown.

Finally, the green footprint of the Chinese giant salamander, which inspired Karel Čapek to write one of his most famous works "War with the Newts", draws attention to the wider cultural significance of zoos and, moreover, to the fact that we do not want to merely present superficially attractive animals to the public. You should certainly pay our giant salamander house a visit!

So let's turn to the story that I promised at the opening.

In connection with your conference I would like to tell you a little about the fate of a veterinarian, a soldier and above all the "war director" of Prague Zoo, MVDr. Jan Vlasák. His

entries in the zoo's annals are truly written in gold. During the Second World War - at the time when Czechoslovakia was occupied by Nazi Germany - he not only managed to protect Prague Zoo from the occupying forces, but even managed to develop it further. In addition, he successfully instigated the utterly unheard of artificial rearing of a polar bear.

Jan Vlasák was born in 1893 and on the eve of the First World War he studied at the Military Veterinary Academy in Vienna. Immediately after completing his studies he returned to Galicia and enlisted as a soldier in the Austro-Hungarian monarchy, which ruled over the Czech lands at the time. He survived almost the entire Great War in the hell of the Eastern Front. After the war's end and the creation of Czechoslovakia, he joined the Czechoslovak Army, where he gradually reached the rank of Lieutenant Colonel. The assessments in his personal file portray him as a diligent, conscientious and capable man with a very good social manner, who practiced gymnastics, tennis, swimming, archery, shooting, skating and motor sports.

Following the occupation of Czechoslovakia by the German army and the subsequent dissolution of the Czechoslovak Army, he was assigned to Prague Zoo in October, 1939, where he became the head of its management (director in modern terminology). A long-time zoo worker, Ing. Antonín Turek, later recalled Vlasák's activities in the war years as follows: "To his credit, he built an exemplarily managed establishment with a warehouse for feed, a game kitchen, repair workshops and its own agricultural production of both plant and animal origin. A well-equipped veterinary unit was set up in the same building with a dissecting room, a laboratory and a small animal clinic that was even equipped with an X-ray. He introduced his military precision into the establishment by building a science library, keeping thorough records on the animals and other organizational changes. At the time, he ran the zoo under very demanding conditions, which required personal determination and fortitude."

Dr Vlasák was in an extremely difficult role, not only because of the shortages due to the war, but also because he had to deal with the occupiers and the protectorate authorities - whilst at the same time hiding the zoo staff's resistance activities. On top of all this he worked as a zoo veterinarian; in 1942, he achieved significant results in the treatment of gapeworm in exotic birds. It is no wonder that he did not have a single holiday during his tenure at the zoo.

Naturally, when evaluating Vlasák's contribution to Prague Zoo, I must emphasize his successes as a breeder. It to his great credit, for instance, that he developed the breeding of Przewalski's horse. But above all, he took care of the aforementioned artificial rearing of a polar bear. This was at the turn of 1942 and 1943, when he and his wife reared the young cub that the polar bear Nora gave birth to; this was done in their flat in Prague Zoo's administrative building. A detailed report on this absolutely unique event was published in 1950 in the journal "Der Zoologische Garten" printed in Leipzig. However, the international fame of this polar bear reared by Dr Vlasák must be dated to 1947, when he presented a film and photographs at the meeting of the London Zoological Society. On the basis of this presentation a book, "Snow White, the Story of a Polar Bear Cub", was published in London in 1949, and in 1951 it came out in New York as "Snowy: The Story of a Polar Bear Cub".

By then, however, Dr Vlasák was no longer working at Prague Zoo. In 1946, he returned to the army and served at the Ministry of Defence in the rank of Colonel until 1954. His

personal file closes with his request to be allowed to wear his military uniform in retirement. He died in 1957.

In 2012, not only did we publish his book on Snowy, we also unveiled a sculpture as a constant reminder of how he reared a polar bear and all his work for Prague Zoo.

I would be very pleased indeed if you could visit us at Prague Zoo and remember a colleague who did so much for it. I firmly believe you will enjoy your stay in Prague and I wish your conference every success!

Miroslav Bobek, Director of Prague Zoo

Alex D. Greenwood Kristin Mühldorfer Steven Seet Josepha Prügel Stefanie Lenz Heribert Hofer Jaroslav Šimek Roman Vodička Lucie Šašková Miroslav Bobek Stephanie Sanderson Hugo Fernández Bellon Sabine Öfner Kim Gruetzmacher Hanspeter Steinmetz Robert Hilsenroth Allison Tuttle Sam Rivera Alicia Hahn Adine Nicholson Kathy Judge Blacklock Mike Adkesson

N A S

Leibniz Institute for Zoo and Wildlife Research IN THE FORSCHUNGSVERBUND BERLIN E.V.

Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW) Berlin Germany



PRAGUE ZOO

Prague zoological garden Prague, Czech Republic



European Association of Zoo and Wildlife Veterinarians (EAZWV) Liebefeld-Berne Switzerland



American Association of Zoo Veterinarians (AAZV) Yulee, Florida USA



This booklet is printed on recycled paper !

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Scientific programme

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Photos: Prague zoological garden © Hamernik Petr

ACKNOWLEDGEMENT - SPONSORS



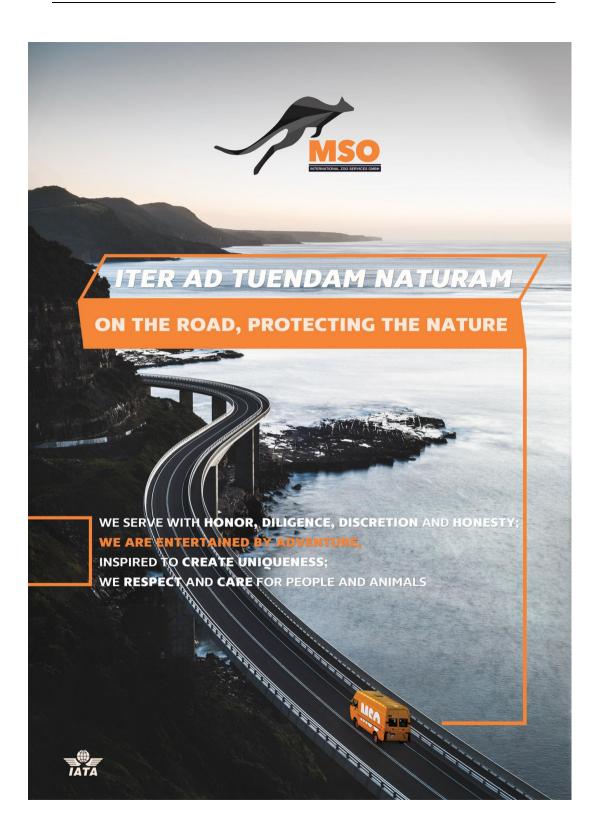
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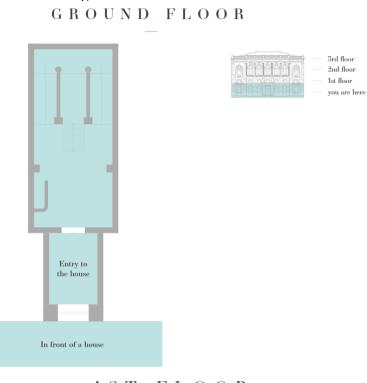


The ACZM is a registered veterinary specialty college by the American Veterinary Medical Association for sponsoring of continuing education credits. Individual States may have different laws or policies on acceptability of conferences, meetings or courses to qualify for continuing education (CE) credit. You are advised to check with the State(s) in which you are licensed to ensure that the CE credits provided are acceptable.

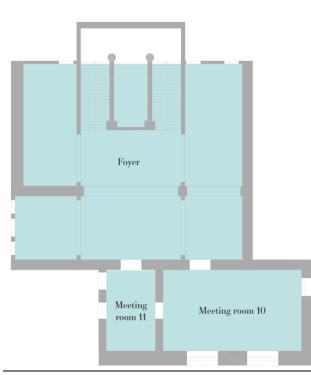


FLOOR PLAN: CONFERENCE VENUE

(National House of Vinohrady)

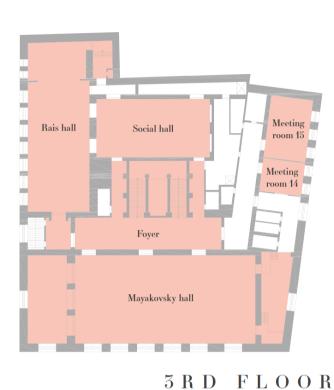






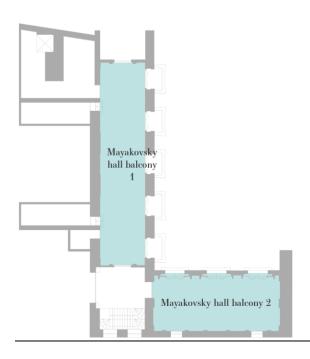
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	— you are here
	ground floor

2 N D F L O O R



- 5rd floor you are here - 1st floor ground floor

	you are here
	2nd floor
	1st floor
	ground floor



© National House of Vinohrady

SCIENTIFIC PROGRAMME – GENERAL INFORMATION

COPYRIGHT REGULATIONS

Please note that in your own interest and for copyright reasons it is strictly forbidden to take pictures, videos and sound recordings of any conference contribution especially unpublished data during the whole conference. This includes especially talks, discussions, posters and round table discussions. You may not take pictures or copies of slide shows, posters and abstracts from the Conference Proceedings. You may not use twitter, facebook & Co to distribute unpublished data. Pictures may be taken only upon authorisation by the authors and/or copyright holders. Anyone who violates the copyrights will be expelled from the conference and they are accountable to the law if they violate copyrights or steal data.

PRESENTATIONS AT THE CONFERENCE

There will be three different forms of presentations at the conference: plenary talks, oral contributions and poster contributions.

All presentations will be held at the conference centre at the National House of Vinohrady in **Prague, Czech Republic**. There will be four **plenary talks**, one at the beginning of each morning session from Monday till Thursday. The last plenary talk will be held on the Thursday morning session. Contributed talks will be held in **22** sessions and are scheduled with 8, 10 or 12 min (depending on the session) followed by 1-2 min of discussion. The session chairs will keep a strict schedule.

PowerPoint presentations require a USB-stick containing all necessary files. **Speakers are asked to hand in their USB flash drive at the registration desk to receive their registration documents**. For technical reasons, individual laptops will only be hooked up to the projector in rare exceptions after prior agreement with the organisers.

Posters are displayed in the conference centre and can be viewed at all times. Posters are arranged alphabetically. **Contributors of posters are requested to present their posters in person during the Poster Pasta Party** (Tuesday, 18:30 - 20:30). Poster mounting starts on Sunday, October 7, at 14:00. Posters should be removed by Thursday, October 11, 20:00. All posters not removed by this time will be disposed of.

Workshops 1 – 9 are scheduled for Sunday, 7^{th} October (for times, durations, and locations please see below).

- Clinical Techniques in Lagomorphs and Rodents (09:00 – 13:00, Czech University of Life Sciences Prague, Faculty of Agrobiology, Food and Natural Resources)
- 2. Avian Handling (09:00 – 13:00, Prague Zoo)
- 3. Advanced Anaesthesia (09:00 – 17:00, Prague Zoo)
- Online Literature Searching Skills Lab (09:00 – 13:00, National House of Vinohrady)
- 5. Using Outbreak software for modeling infectious disease in wildlife populations (09:00 13:00, National House of Vinohrady)
- 6. AAZV 25th Annual Zoo and Wildlife Pathology Workshop (09:00 17:00, National House of Vinohrady)

- 7. Great Ape Health Masterclass with an Emphasis on Cardiac Disease (09:00 17:00, National House of Vinohrady)
- 8. Joint EAZA/AZA Vet Advisors Workshop (13:30 – 17:30, National House of Vinohrady)
- ECZM-ACZM Ultrashort course (08:00 – 18:00, National House of Vinohrady)

All workshop participants will receive a name badge, which ensures free entry to the workshop areas throughout the day. This is also your name badge for the conference and ensures access to all conference areas.

Roundtable discussions (parallel sessions) are scheduled for **Thursday**, **11**th **October** (**14:30** – **15:30**) in the main conference venue (National House of Vinohrady).

- Animal welfare & wellness
- Elephant herpes virus update
- ZIMS for vets
- Conservation by Zoo Vets

Rudolf Ippen Young Scientist Award, IZW/EAZWV. The "Rudolf Ippen Young Scientist Award" was awarded for the first time in Madrid in 2010, in memory of the internationally acclaimed scientist Prof Dr Rudolf Ippen, who passed away in March 2009.

The award will go to a young scientist whose research demonstrates challenging and innovative ideas and/or offers useful practical or theoretical knowledge to the work of a broad spectrum of zoo and wildlife veterinarians, biologists and other wildlife scientists.

Application for 2019: Please send your CV, list of publications (at least one as first author), and a PDF copy of the three most important publications of the last 12 months to: 2018@zoowildlifehealth.org.

AAZV Manuscript competitions. The top presentations in the Graduate Degree Program Competition and the Post-graduate Veterinarian Competition will be recognized with awards during the closing session scheduled between **12:15** and **13:15** on **Friday, 12th October.**

Abstracts of all scientific contributions to the conference are published in the "Proceedings of the 2018 Joint EAZWV/AAZV/Leibniz-IZW Conference".

In this "Conference Programme" booklet, the page number at the end of the title of each contribution indicates the page number of the corresponding contribution in the published proceedings.

Networking

- 1. ACZM annual meeting: Sunday, 7th October, 10:00 13:00
- Committee and working group meetings: Monday, 8th October, 17:30 – 19:30 Tuesday, 9th October, 17:30 – 19:00
- 3. EAZWV student board meeting: Monday, 8th October, 17:30 19:00
- **4. ECZM exam preparation course:** Wednesday, 10th October, 06:30 08:30
- 5. EAZWV general assembly (all members): Thursday, 11th October, 10:45 12:15
- 6. AAZV business meeting (all members): Thursday, 11th October, 10:15 12:00

SOCIAL EVENTS

Ice breaker (welcome evening), Sunday, 7th October, 17:30 – 20:00, conference venue

We will meet at the conference venue "National House of Vinohrady (NHV)" (Namesti Miru 9, 120 53 Prague 2) and greet colleagues over a variety of snacks and beverages.

Poster Pasta Party, Tuesday, 9th October, 18:30 - 20:30, conference venue

You will be invited to enjoy and discuss poster presentations while having some good pasta and drinks.

Students Night out, Tuesday, 9th October, after the Poster Pasta Party

Organised by the EAZWV Student Section, this event became a very popular part of the social programme over the past years. It is the ideal spot to socialise with fellow students from all over the world and exchange experiences and ideas over a cold beer.

Exact time and place will be announced at the EAZWV Student board Meeting (Monday, 8th October, 17:30 – 19:00), so do not miss it!

Contact: Sara Abreu (students@eazwv.org).

Zoo visit, Wednesday, 10th October, 13:45 - 21:00

Prague Zoo invites all conference attendees to visit their facilities on Wednesday afternoon and evening. The program will be completed with a dinner in the zoo restaurant (18:00 - 21:00).



Photos: Prague zoological garden entrance and elephants © Hamernik Petr

During your stay in Prague Zoo you will have the opportunity to test your skills in a darting competition or to look behind the scenes at various stations.

	1.	2.	3.	4.	5.	6.
Station	Sea Lions	Indonesian Jungle House (IJL)	Elephant House	African House (Giraffes)	Giant Salamander House (GSH)	Veterinary Clinic
	14:00	14:30	14:00	14:30	14:00	Open:
Times	15:00	15:30	15:00	15:30	15:00	14:00-17:30
Times	16:00	16:30	16:00	16:30	16:00	(last visit)
	17:00	17:30				
Meeting point	Sea Lions exhibit	IJH visitor entrance	In front of Gulab restaurant/ near the fountain	Meerkats exhibit	GSH visitor entrance	Clinic
Capacity per visit	max 20	max 20	max 20	max 20	max 10	Not limited

Timetable - behind the scenes stations:

If you would like to take part in one or more of these tours, please write your name on the registration list on the information board in the conference centre.

Shortly before the zoo dinner, we would like to take a joint photo of all conference attendees. Please get together at 17:50 at the Sea Lion's Amphitheatre.



How to get to the bus shuttle which will take you to Prague Zoo:

- you have to go to the underground station "I.P. Pavlova":
 Leave the conference venue and follow the street "Náměstí Míru", then turn into the street "Jugoslávská"
- at underground station "I.P. Pavlova" you take line "C" (→ Letňany) to "Nádraží Holešovice" (ticket costs 32 CZK)
- bus shuttle will leave from bus stop for line no. 112 and will be **marked by** conference banner behind the glass

The whole ride will take approx. 14 minutes.

Bus shuttle schedule:

From "Nádraží Holešovice" to the zoo

- 13:45, 14:00; 14:15, 14:30, 14:40, 14:50, 15:00, 15:10, 15:20

In the evening, the busses will leave at the zoo parking place

- 18:50, 19:10, 19:30, 19:50, 20:10, 20:30, 20:50, 21:10, 21:30

Free admission for conference participants to Prague Zoo

All **conference participants** and accompanying persons who have registered have free admission to Prague Zoo from Sunday, 7th October to Friday, 12th October. Please be prepared to present your name badge at the entrance gates to obtain free entry.

Student-mentor-mixer, Thursday, 11th October, 17:30 - 19:00, conference venue

This event is open to anyone registered as student. The aim is to provide students with the chance to meet some of their potential future mentors and/or employers. In a casual atmosphere students can get in touch with the mentors during short round-table discussions, ask questions and get advice regarding career path, work experience, training, etc.

Festive Evening - Medieval Night in Old Prague, Thursday, 11th October, 19:30 – 22:30

We are looking forward to a special evening in the medieval tavern "U Pavouka"! Enjoy a five-course menu of traditional Czech food while being entertained by a historical fantasy show with live music, jugglers, belly dancers and much more.

The festive evening includes 2,5 hours show, a five-course menu and beverages (wine, beer, softdrinks). Doors open at 19:30; the show and dinner starts at 20:00.

Address restaurant: Krčma U Pavouka, Celetná 597/17, 110 00 Praha 1 - Staré Město



© Krčma U Pavouka

Conference banquet, Friday, 12th October, 20:00 - 24:00, conference venue

The banquet is always one of the highlights of the conference. It will take place on the last evening in the main conference venue.



© National House of Vinohrady

Accompanying persons are very welcome to participate in all social events provided that a place is booked for them by a conference participant.

VENUES

Conference centre (registration, conference, lunch)

National House of Vinohrady (NHV) Namesti Miru 9 120 53 Prague 2



© National House of Vinohrady

Workshops (on Sunday, 7th October)

National House of Vinohrady (NHV)

Namesti Miru 9 120 53 Prague 2

Prague Zoo U Trojského zámku 120/3 171 00 Prague 7

Faculty of Agrobiology, Food and Natural Resources

(Fakulta agrobiologie, potravinových a přírodních zdrojů - FAPPZ) Czech University of Life Sciences Prague Kamýcká 129 165 00 Prague 6 - Suchdol Building: FAPPZ-C (Institute of Veterinary Sciences – Katedra veterinárních disciplín) Room: C1

Conference registration & information desk

The conference office is directly located at the conference centre National House of Vinohrady (Foyer 1st Floor).

Opening times of the conference registration & information desk:

➤ Sunday	7 th October	07:30 - 17:30
Monday	8 th October	07:00 - 17:30
Tuesday	9 th October	07:30 - 17:30
Wednesday	10 th October	08:00 - 13:00
Thursday	11 th October	08:00 - 17:30
➤ Friday	12 th October	08:00 - 12:00

The staff at the registration and information desk will be happy to help you with any questions and problems regarding the conference.

Notice and communication boards for announcements, changes, waiting lists or additions to the programme will be located at the registration & information desk. Messages for other participants can be posted there, as well.

Coffee/tea and other refreshments will be served during breaks; **lunch** will also be served in the conference centre.

SCIENTIFIC PROGRAMME

7 th October	Sunday
	Workshops and meetings: parallel sessions Locations: Three locations as given below
07:30 - 17:30	Registration at conference venue (Foyer 1 st Floor)
	hop will be held at the Czech University of Life Sciences Prague, Faculty of nd Natural Resources:
09:00 - 13:00	Clinical Techniques in Lagomorphs and Rodents Vladimír Jekl (Veterinary Clinic Jekl & Hauptman, Czech Republic)
The following two w	orkshops will be held at Prague Zoo:
09:00 - 13:00	Avian Handling Helena Vaidlova (Veterinary Clinic MADA, Czech Republic)
09:00 - 17:00	Advanced Anaesthesia Christine Lendl (Grünwald, Germany) Carsten Grøndahl (Copenhagen Zoo, Denmark)
The following works	hops and meetings will be held at the National House of Vinohrady (NHV):
09:00 - 13:00	Online Literature Searching Skills Lab Heather Moberly (Texas A&M University, USA)
09:00 - 13:00	Using Outbreak software for modelling infectious disease in wildlife populations Robert Lacy (Chicago Zoological Society, USA)
09:00 - 17:00	AAZV 25th Annual Zoo and Wildlife Pathology Workshop Bruce Rideout (San Diego Zoo Global, USA) Dalen Agnew (Michigan State University, USA)
09:00 - 17:00	Great Ape Health Masterclass with an Emphasis on Cardiac Disease Matyas Liptovszky (Twycross Zoo, UK)
10:00 - 13:00	ACZM annual meeting
13:30 - 17:30	Joint EAZA/AZA Vet Advisors Workshop Stephanie Sanderson (EAZWV, UK) Hayley Murphy (Zoo Atlanta, USA)
08:00 - 18:00	ECZM-ACZM Ultrashort course Hanspeter Steinmetz (EAZWV; Abenteuerland Walter Zoo, Schweiz)
17:30 - 20:00	ICE BREAKER/WELCOME EVENING (Conference venue)

8 th October		Monday
07:00 - 17:30		Registration (Foyer 1 st Floor)
08:00 - 08:30		Opening ceremony (Steinmetz H, Greenwood AD, Adkesson M, Bobek M)
Session chairs	Backues K Casado Gomez A	Ethics and welfare
08:30	Sandøe P	PLENARY TALK: ZOOS AND ETHICS – WHAT ARE THE ISSUES, AND HOW CAN THEY BE ADDRESSED? (p. 1)
09:30	Chapman S	A PROACTIVE APPROACH TO IMPROVING THE WELFARE OF AGEING ZOO ANIMALS (p. 2)
09:43	Wendler P, Ertl N	FOOT HEALTH OF ASIAN ELEPHANTS (<i>Elephas maximus</i>) IN EUROPEAN ZOOS – STATUS REPORT AND INFLUENCING FACTORS (p. 5)
09:56	De Cuyper A	KILL FREQUENCIES IN TERRESTRIAL MAMMALIAN CARNIVORES: SPECIES DIFFERENCES AND IMPLICATIONS FOR FEEDING REGIMES (p. 7)
10:09	Lamglait B	ETHICAL CONSIDERATIONS FOR ELECTRO-IMMOBILIZATION IN ADULT BROOK TROUT (Salvelinus fontinalis) (p. 9)
10:22		Coffee break
10:50	Molter C	ANIMAL WELFARE INITIATIVES FOR AN EVENING HOLIDAY LIGHTS EVENT AT THE HOUSON ZOO (p. 10)
11:03	Pye G	HOW ZOO VETERINARIANS BECOME MORE VALUABLE: DELIVER ON ANIMAL HEALTH AND ORGANIZATIONAL HEALTH (p. 11)
11:16	Clauss M	CAPTIVITY, LIBERATION, CONSERVATION, THE WILD: RHETHORICS AND THE VALUE OF ZOOLOGICAL INSTITUTIONS (p. 13)
Session chairs	Hilton C Ruetten M	Hoofstock
Session chairs 11:30		Hoofstock COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15)
	Ruetten M	
11:30	Ruetten M Dadone L	COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15) NEMATOPHAGOUS FUNGUS (<i>Duddingtonia flagrans</i>) PROGRAM INTEGRATION FOR TRICHOSTRONGYLE PARASITE CONTROL IN EXOTIC ARTIODACTYLID SPECIES
11:30 11:45	Ruetten M Dadone L Fontenot D	COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15) NEMATOPHAGOUS FUNGUS (<i>Duddingtonia flagrans</i>) PROGRAM INTEGRATION FOR TRICHOSTRONGYLE PARASITE CONTROL IN EXOTIC ARTIODACTYLID SPECIES (p. 16) PERIPARTURIENT DISTAL LIMB SWELLING AND PERIOSTEAL REACTION IN SICHUAN TAKIN (<i>Budorcas taxicolor tibetana</i>): 5 CASES OF PRESUMPTIVE HYPERTROPHIC
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11:30 11:45 12:00 12:15 12:30	Ruetten M Dadone L Fontenot D Marinkovich M Shotton J Lung N	COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15) NEMATOPHAGOUS FUNGUS (<i>Duddingtonia flagrans</i>) PROGRAM INTEGRATION FOR TRICHOSTRONGYLE PARASITE CONTROL IN EXOTIC ARTIODACTYLID SPECIES (p. 16) PERIPARTURIENT DISTAL LIMB SWELLING AND PERIOSTEAL REACTION IN SICHUAN TAKIN (<i>Budorcas taxicolor tibetana</i>): 5 CASES OF PRESUMPTIVE HYPERTROPHIC OSTEOPATHY (p. 18) PITUITARY PARS INTERMEDIA DYSFUNCTION (EQUINE CUSHING'S DISEASE) IN NON-DOMESTIC EQUIDS (p. 20) Lunch
11:30 11:45 12:00 12:15 12:30 Session chairs	Ruetten M Dadone L Fontenot D Marinkovich M Shotton J Lung N Magnone W	COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15) NEMATOPHAGOUS FUNGUS (<i>Duddingtonia flagrans</i>) PROGRAM INTEGRATION FOR TRICHOSTRONGYLE PARASITE CONTROL IN EXOTIC ARTIODACTYLID SPECIES (p. 16) PERIPARTURIENT DISTAL LIMB SWELLING AND PERIOSTEAL REACTION IN SICHUAN TAKIN (<i>Budorcas taxicolor tibetana</i>): 5 CASES OF PRESUMPTIVE HYPERTROPHIC OSTEOPATHY (p. 18) PITUITARY PARS INTERMEDIA DYSFUNCTION (EQUINE CUSHING'S DISEASE) IN NON-DOMESTIC EQUIDS (p. 20) Lunch Primates I EPIDEMIOLOGICAL AND CLINICAL ASPECTS OF <i>Taenia crassiceps</i> CYSTICERCOSIS IN
11:30 11:45 12:00 12:15 12:30 Session chairs 13:30	Ruetten M Dadone L Fontenot D Marinkovich M Shotton J Lung N Magnone W Danière C	COMPARING FOOT HEALTH OF ZOO AND FREE-RANGING GIRAFFE (p. 15) NEMATOPHAGOUS FUNGUS (<i>Duddingtonia flagrans</i>) PROGRAM INTEGRATION FOR TRICHOSTRONGYLE PARASITE CONTROL IN EXOTIC ARTIODACTYLID SPECIES (p. 16) PERIPARTURIENT DISTAL LIMB SWELLING AND PERIOSTEAL REACTION IN SICHUAN TAKIN (<i>Budorcas taxicolor tibetana</i>): 5 CASES OF PRESUMPTIVE HYPERTROPHIC OSTEOPATHY (p. 18) PITUITARY PARS INTERMEDIA DYSFUNCTION (EQUINE CUSHING'S DISEASE) IN NON-DOMESTIC EQUIDS (p. 20) Lunch Primates I EPIDEMIOLOGICAL AND CLINICAL ASPECTS OF <i>Taenia crassiceps</i> CYSTICERCOSIS IN LEMURS IN FRENCH ZOOS (p. 21) REPORT ON THE CAUSES OF MORBIDITY AND MORTALITY IN THE SULAWESI MACAQUE (<i>Macaca nigra</i>) EUROPEAN ENDANGERED SPECIES PROGRAMME

8 th October		Monday
Session chairs	Carpenter N Chenet B	Primates II: case reports
14:30	Gamble K	PROBABLE ENALAPRIL HEPATOTOXICITY IN A 15 YEAR OLD MALE WESTERN LOWLAND GORILLA (<i>Gorilla gorilla gorilla</i>) (p. 28)
14:40	Knauf-Witzens T, Schäufele T	PHARMACOLOGICAL TREATMENT OF A MALE BONOBO (<i>Pan paniscus</i>) WITH SUSPECTED DILATED CARDIOMYOPATHY UNDER ECHOCARDIOGRAPHIC CONTROL AT WILHELMA, STUTTGART, GERMANY, A SINGLE CENTER EXPERIENCE (p. 31)
14:50	Niphuis H	REVERSE ZOONOTIC HUMAN HERPES VIRUS 1 INFECTION IN TWO YOUNG PERUVIAN BLACK SPIDER MONKEYS (<i>Ateles chamek</i>) AT THE TARICAYA RESCUE CENTER, PUERTO MALDONADO, PERU (p. 32)
15:00	Persky M	ANTEMORTEM DIAGNOSIS AND SUCCESSFUL TREATMENT OF A COMPLETE MOLAR PREGNANCY IN A GERIATRIC BONOBO (<i>Pan paniscus</i>) (p. 34)
15:10	Schuele A	FIRST DETECTION OF CHOLESTASIS AND TREATMENT WITH AN ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY IN A SUMATRAN ORANGUTAN (Pongo pygmaeus abelii).(p. 36)
15:20		Tea break
Session chairs	Sanderson S	Nagoya Protocol
15:50	Muir A	THE NAGOYA PROTOCOL: IMPLICATIONS FOR ZOO AND WILDLIFE VETS (p. 38)
Session chairs	Sos E Padilla L	AZA/EAZA Vet Advisors I
16:00	D'Agostino J	AVIAN BORNAVIRUS IN THE KEA (Nestor notabilis) SSP POPULATION (p. 39)
16:15	Jourdan B	MORBIDITY AND MORTALITY OF TAKIN (<i>Budorcas taxicolor</i>) POPULATIONS IN NORTH AMERICAN ZOOLOGICAL INSTITUTIONS FROM 1997 TO 2017 (p. 40)
16:30	Segura-Cortijos C	MORTALITY AND MORBIDITY IN CAPTIVE LIVINGSTONE'S FRUIT BATS (<i>Pteropus livingstonii</i>) (p. 41)
16:45	Ordonneau D	PRIMARY CAUSES OF MORBIDITY AND MORTALITY IN WILD VERSUS CAPTIVE LOWLAND TAPIRS (<i>Tapirus terrestris</i>) - A MODEL COMPARISON FOR OTHER TAPIR SPECIES (p. 44)
17:00	Ashpole I	RETROSPECTIVE ANALYSIS INTO THE CAUSES OF MORBIDITY AND MORTALITY IN MOUNTAIN CHICKEN FROGS (<i>Leptodactylus fallax</i>) HELD AT FOUR UK ZOOLOGICAL COLLECTIONS FROM 1999-2018 (p. 46)
17:15	Singleton C, Mulot B	RETROSPECTIVE REVIEW OF MORTALITY IN QUEENSLAND KOALA (<i>Phascolarctos cinereus</i>) IN ZOOLOGICAL FACILITIES IN NORTH AMERICA (1976-2016) AND EUROPE (1987-2017) (p. 47)
17:30 - 19:30		COMMITTEE AND WORKING GROUP MEETINGS: AAZV Law Committee (17:30 – 18:30, Rais Hall) AAZV Development and PR (18:30 – 19:30, Rais Hall) AAZV international Committee (17:30 – 18:30, Mayakovsky Balcony 1) AAZV infectious diseases (18:30 – 19:30, Mayakovsky Balcony 2) EAZWV Student board (17:30 – 19:00, Mayakovsky Hall) EAZWV Ethics and Welfare (17:30 – 18:30, Meeting Room 14) EAZWV/EAZA legislation group (18:30 – 19:30, Meeting Room 10) EAZWV/EAZA data and resource sharing (17:30 – 18:30, Meeting Room 15) EAZWV/EAZA infectious diseases (17:30 – 18:30, Mayakovsky Balcony 2)

9 th October		Tuesday
07:30 - 17:30		Registration (Foyer 1 st Floor)
Session chairs	Zachariah T Hatt J-M	Avian I
08:00	Garner MM	PLENARY TALK: EMERGING AND LESS RECOGNIZED DISEASES OF ZOO BIRDS (p. 48)
09:00	Harrison T	TWENTY-EIGHT YEARS OF AVIAN CANCER LITERATURE: WHAT'S COMMON AND WHAT'S HELPED (p. 49)
09:15	McLelland D	MORTALITY EVENT IN CRITICALLY ENDANGERED ORANGE-BELLIED PARROTS (<i>Neophema chrysogaster</i>) AT ADELAIDE ZOO, AND DETECTION OF PSITTACID ADENOVIRUS 2 IN THE CAPTIVE POPULATION (p. 50)
09:30	Shopland S	CAUSES OF MORTALITY IN PINK PIGEONS (<i>Nesoenas mayeri</i>) HOUSED IN EUROPEAN COLLECTIONS: 1979-2018 (p. 51)
09:45	Troan BV	LYMPHOSARCOMA IN CAPTIVE BLUE-CROWNED PARROTS (Loriculus galgulus) (p. 52)
10:00	Witte C	WHAT CAN BIG DATA AND A SOCIAL NETWORK ANALYSIS TELL US ABOUT AVIAN MYCOBACTERIOSIS AND DISEASE TRANSMISSION? (p. 53)
Session chairs	Carpenter N Chenet B	Avian II: case reports
10:15	Garcés Torres RS	UNILATERAL PHACOEMULSIFICATION OF A MATURE CATARACT IN A CHILEAN FLAMINGO (<i>Phoenicopterus chilensis</i>) (p. 55)
10:25	Loucachevsky T	USE OF AN ELASTIC TRANSARTICULAR EXTERNAL CONSTRUCT FOR SURGICAL TREATMENT OF AN INTERTARSAL JOINT LUXATION ON A HARRIS'S HAWK (<i>Parabuteo unicinctus</i>) (p. 57)
10:35		Coffee break
Session chairs	Mylniczenko N Sainmaa S	Aquatics and Marine Mammal
11:00	Cutler D	TISSUE ENZYME ACTIVITIES IN THE CREVALLE JACK (Caranx hippos) (p. 59)
11:15	Greenwood A	A NOVEL AND DIVERGENT ZOO POLAR BEAR (Ursus maritimus)-ASSOCIATED MASTADENOVIRUS (p. 60)
11:30	Meegan J	CURRENT STRATEGIES FOR DIAGNOSIS, TREATMENT, MANAGEMENT AND PREVENTION OF RENAL CALCULI IN BOTTLENOSE DOLPHINS (<i>Tursiops truncatus</i>) WHAT WE'VE LEARNED AND WHERE WE'RE HEADED (p. 61)
11:45	Mylniczenko N	ULTRASOUND COMPARISON OF THE LIVER TO SPLEEN AS AN EVALUATION OF LIVER AND BODY CONDITION IN ELASMOBRANCHS (p. 64)
12:00	Shapiro K	DISTRIBUTION AND VIRULENCE OF <i>Toxoplasma gondii</i> IN SOUTHERN SEA OTTERS (<i>Enhydra lutris nereis</i>) (p. 66)
12:15		Lunch
Session chairs	Allender M Drake G	Reptile and Amphibian I
13:15	Larouche CB	PHARMACODYNAMICS OF MIDAZOLAM AND REVERSAL WITH FLUMAZENIL IN THE BALL PYTHON (<i>Python regius</i>) (p. 68)
13:30	Frei S	EVALUATION OF A VENTRAL AND LEFT LATERAL COELIOSCOPY APPROACH IN BEARDED DRAGONS (<i>Pogona vitticeps</i>) (p. 69)
13:45	Kubiski S	SPINAL OSTEOARTHROPATHY IN MULTIPLE SNAKE SPECIES AT SAN DIEGO ZOO (p. 71)
14:00	Marschang R	OPTIMIZING THE DETECTION OF FERLAVIRUSES (p. 72)
14:15	Paré JA	A REVIEW OF THE NOVEL REPTILE FUNGAL PATHOGENS FOR THE ZOO PRACTITIONER (p. 73)
14:30	Steeil JC	RETROSPECTIVE REVIEW OF SNAKE FUNGAL DISEASE (<i>Ophidiomyces</i> ophiodiicola) AT THE SMITHSONIAN'S NATIONAL ZOOLOGICAL PARK (1983- 2017) (p. 76)

9 th October		Tuesday
Session chairs	Carpenter N Chenet B	Reptile and Amphibian II: case reports
14:45	Christman JE	DIAGNOSIS, MOLECULAR CHARACTERIZATION AND MANAGEMENT OF PNEUMONIA CAUSED BY A NOVEL <i>Nannizziopsis</i> spp. IN A CAPTIVE GALAPAGOS TORTOISE (<i>Chelonoidis nigra</i>) (p. 77)
Session chairs	Sos E Padilla L	AZA/EAZA Vet Advisors II - Elephant
15:00	Howard L	UPDATE ON ELEPHANT ENDOTHELIOTROPIC HERPESVIRUS (EEHV) IN ASIAN ELEPHANT RANGE COUNTRIES: A REPORT FROM THE 3 RD EEHV IN ASIA WORKING GROUP MEETING (p. 79)
15:15	Jesus Fontes S	ELEPHANT ENDOTHELIOTROPIC HERPESVIRUS HEMORRHAGIC DISEASE - THE IMPACT ON THE EUROPEAN CAPTIVE POPULATION OF ASIAN ELEPHANT (<i>Elephas maximus</i>) (p. 81)
15:30		Tea break
Session chairs	Pye G Greenwood A	Wildlife and Conservation
16:00	Calle P	RISK MITIGATION STRATEGIES AND HEALTH MANAGEMENT IN REPTILE REINTRODUCTION PROGRAMS (p. 83)
16:15	Dutton C	AN EPIZOOTIC OF MYCOTIC SHELL DISEASE ASSOCIATED WITH NANNIZZIOPSIACEAE FUNGAL INFECTION IN JUVENILE WOOD TURTLES (<i>Glyptemys insculpta</i>) IN A CONSERVATION HEAD-STARTING PROGRAM (p. 86)
16:30	Lamberski N	COMMUNITY-DRIVEN CONSERVATION IS SAVING ELEPHANTS (Loxodonta africana) IN NORTHERN KENYA (p. 87)
16:45	Miller M	Mycobacterium tuberculosis IN FREE-RANGING ELEPHANTS – EMERGING ZOOANTRHOPOGENIC DISEASE? (p. 88)
17:00	Grilo M	WIDLIFE SENTINELS: ARE FECAL ENTEROCOCCI FROM OTTERS SUITABLE INDICATORS OF ANTIMICROBIAL RESISTANCE DISSEMINATION IN AQUATIC ENVIRONMENTS? (p. 90)
17:15	Perera V	POPULATION THRESHOLD AND EMERGING PARASITIC DISEASES OF ELEPHANTS IN SRI LANKA (p. 92)
17:30 - 18:30		COMMITTEE AND WORKING GROUP MEETINGS: AAZV members services / EAZWV conference + finance & sponsorship (17:30 – 18:30 Mayakovsky Hall) JZWM editorial board (17:30 – 19:00, Meeting Room 15) EAZWV Communications working group (17:30 – 18:30, Meeting Room 14) EAZWV Education & Training (17:30 – 18:30, Mayakovsky Balcony 1) EAZWV Sustainability working group (17:30 – 18:30, Mayakovsky Balcony 2)
18:30 - 20:30		POSTER AND PASTA PARTY (Conference venue)

10 th October	r	Wednesday
06:30 - 08:30		ECZM exam preparation course (Meeting Room 14)
08:00 - 13:00		Registration (Foyer 1 st Floor)
Session chairs		Small Mammal
08:30	Jeki V	PLENARY TALK: RODENTS, LAGOMORPHS AND OTHER SMALL MAMMALS IN ZOO COLLECTIONS (p. 95)
Session chairs	Sos E Padilla L	AZA/EAZA Vet Advisors III
09:30	Rideout BA	TOOLS FOR RESEARCH STUDY DESIGN AND DATA MANAGEMENT (p. 96)
09:45	Murphy H	CARDIAC DISEASE AND ADIPOSITY ARE LINKED IN MALE GORILLAS (Gorilla gorilla gorilla) (p. 97)
10:00	Chenet B	CHOLELITHIASIS IN CALLITHRICHIDS IN EUROPEAN ZOOS (p. 98)
10:15	Lung N Pratamiutami A	COLLABORATION ACROSS INSTITUTIONS AND ACROSS CONTINENTS FACILITATES ADVANCEMENTS IN THE DIAGNOSIS AND MANAGEMENT OF CHRONIC RESPIRATORY DISEASE OF ORANGUTANS (<i>Pongo</i> spp.) (p. 100)
10:30		Coffee break
Session chairs	Carpenter N Chenet B	Mammal case reports
11:00	Nielsen A	CORRECTION OF FLEXOR AND ANGULAR FRONT LIMB DEFORMITIES IN A JUVENILE GIRAFFE WITH TENDINITIS (<i>Giraffa cameleopardalis</i>) (p. 103)
11:10	Siegal-Willott J	USE OF SERUM INFLAMMATORY MARKERS TO ASSESS OSTEOARTHRITIS IN AN ASIAN ELEPHANT (<i>Elephas maximus</i>) (p. 104)
11:20	van Zijll Langhout M	A COMPLETE VERTICAL HOOF CRACK IN A GIRAFFE (Giraffa camelopardalis reticulata) AND ITS TREATMENT (p. 106)
11:30	Wenker C	DON'T SQUEEZE IT! TRANSABDOMINAL ULTRASOUND FOR PREGNANCY MONITORING OF A TRAINED PYGMY HIPPOPOTAMUS (<i>Choeropsis liberiensis</i>) (p. 107)
Session chairs	Hanley C Balfanz F	Diagnostics and Therapeutics
11:40	Bentley C	DETECTION OF FOOT PATHOLOGY BY 3D RADIOGRAPHY IN ELEPHANTS (p. 109)
11:55	Donnelly K	BLEOMYCIN IS A SAFE DRUG FOR FOCAL ELECTROCHEMOTHERAPEUTIC TREATMENT OF FIBROPAPILLOMAS IN GREEN TURTLES (<i>Chelonia mydas</i>) (p. 110)
12:10	Flanders JA	USE OF THROMBOELASTOGRAPHY IN THE CLINICAL MANAGEMENT OF EEHV1 INFECTION IN A YOUNG FEMALE ASIAN ELEPHANT (<i>Elephas maximus</i>) (p. 112)
12:25	Perrin KL	HOW INSENSITIVE ARE POPULATION-BASED REFERENCE INTERVALS FOR MONITORING HEMATOLOGIC CHANGES IN ASIAN ELEPHANTS (<i>Elephas</i> maximus)? (p. 113)
12:40	Schiffmann C	BODY CONDITION SCORES IN EUROPEAN ZOO ELEPHANTS (<i>Elephas maximus and</i> Loxodonta africana) – STATUS QUO, DEVELOPMENT OVER TIME AND INFLUENCING FACTORS (p. 114)
12:55	Pohlin F	EFFECTS OF CAPTURE AND TRANSPORT ON CLINICAL CHEMISTRY ANALYTES IN WHITE RHINOCEROSES (<i>Ceratotherium simum</i>) TRANSLOCATED FOR OVER 30 HOURS (p. 115)
13:10		Lunch
13:45 - 21:00		ZOO VISIT incl. ZOO DINNER Prague Zoo, U Trojského zámku 120/3, 171 00 Praha 7 Bus shuttle from Nádraží Holešovice to Prague Zoo 13:45 - 15:20 and back 18:50 – 21:30

11 th October		Thursday
08:00 - 17:30		Registration (Foyer 1 st Floor)
Session chairs	Delk K Vodička R	Natural Disaster Management
08:30	Nadler Y Vodicka R	PLENARY TALK: LESSONS LEARNED: FIVE PILLARS OF EMERGENCY MANAGEMENT (p. 117)
09:30	Hoby S	MANAGEMENT OF REPEATED FLOODWATERS AND WINTER STORMS IN A SWISS ANIMAL PARK (p. 118)
09:45	Marrow JC	NATURAL DISASTER RESPONSE: HURRICANE HARVEY AND THE HOUSTON ZOO (p. 120)
10:00	Myers GE	HURRICANE PREPARATIONS AND AFTERMATH AT ZOO MIAMI (p. 121)
10:15		Coffee break
10:15 - 12:00		AAZV business meeting (all AAZV members, Social Hall)
10:45 - 12:15		EAZWV general assembly (all EAZWV members, Mayakovsky Hall)
12:15		Lunch
Session chairs	Neiffer D Hammer-Jensen T	Anaesthesia
13:15	Gaudio E	ETORPHINE-AZAPERONE-MEDETOMIDINE IMMOBILIZATION IN FREE-RANGING PLAINS ZEBRAS (<i>Equus quagga</i>) (p. 122)
13:30	Greunz EM	INTRACARDIAC SHUNTING AFFECTS MINIMAL ALVEOLAR CONCENTRATION OF ISOFLURANE IN THE RED-FOOTED TORTOISE (<i>Chelonoidis carbonaria</i>) (p. 123)
13:45	Patterson M	A NOVEL FORMULATION OF ALFAXALONE INCREASES THE UTIITY FOR REMOTE DELIVERY IN BIGHORN SHEEP (<i>Ovis canadensis</i>) (p. 125)
14:00	Romano J	SEDATIVE, CARDIORESPIRATORY AND THERMOREGULATORY EFFECTS OF ALFAXALONE ON BUDGERIGARS (<i>Melopsittacus undulatus</i>) (p. 127)
14:15	Sheldon JD	EFFECTS OF OXYGEN AND ISOFLURANE ANESTHESIA ON HEMOLYMPH GAS ANALYSIS AND RIGHTING REFLEX OF ASIAN FOREST (<i>Heterometrus longimanus</i>) AND DICTATOR SCORPIONS (<i>Pandinus dictator</i>) (p. 129)
14:30 - 15:30		ROUND TABLES: Animal welfare & wellness (Paul Murphy J, Feltrer Y, Strike T) Elephant herpes virus update (Howard L) ZIMS for vets (Mulot B, Thompson R) Conservation by Zoo Vets (Walzer C)
15:30	·	Tea break
Session chairs	D'Agostino J Göritz F	Reproduction
16:00	Balfanz F	OVULATION INDUCTION IN ANOESTRUS GREATER ONE-HORNED RHINOCEROS (Rhinoceros bicornis) (p. 131)
16:15	Callealta-Rodriguez I	USING POSITIVE REINFORCEMENT CONDITIONING TO COLLECT SAMPLES FROM UNANAESTHETIZED LIONS (<i>Panthera leo</i>) FOR REPRODUCTIVE STUDIES (p. 132)
16:30	Flacke GL	EVALUATING ADRENOCORTICAL ACTIVITY AND CHARACTERIZING THE REPRODUCTIVE BIOLOGY OF THE PYGMY HIPPOPOTAMUS (<i>Choeropsis</i> <i>liberiensis</i>) THROUGH NON-INVASIVE ENDOCRINE MONITORING (p. 134)
16:45	Hildebrandt TB	ENRICHING THE GENETIC POOL AND MANAGING THE SEX RATIO OF CAPTIVE ELEPHANT POPULATIONS THROUGH ARTIFICIAL INSEMINATION WITH FROZEN- THAWED SEMEN COLLECTED IN THE WILD (p. 136)
17:00	Holtze S	A FIRST STEP TOWARDS ASSISTED REPRODUCTIVE TECHNOLOGIES IN BATS: SPERM CRYOPRESERVATION (p. 138)
17:15	Lambo CA	SERUM ANTI-MÜLLERIAN HORMONE CONCENTRATION DURING CONTROLLED OVARIAN STIMULATION IN FELIDS FOR IMPROVED MONITORING OF REPRODUCTIVE POTENTIAL (p. 139)
17:30 - 19:00		STUDENT MENTOR MIXER (Rais and Social Hall)
19:30 - 22:30		FESTIVE EVENING - MEDIEVAL NIGHT IN OLD PRAGUE Krčma U Pavouka, Celetná 597/17, 110 00 Praha 1 - Staré Město

12 th October		Friday
08:00 - 12:00		Registration (Foyer 1 st Floor)
Session chairs	McCain S Wiegmann L	Felids
08:30	Cushing A	ECHOCARDIOGRAPHIC PARAMETERS IN ADULT TIGERS (<i>Panthera tigris</i>) DURING TWO PHASES OF AN ANESTHETIC PROTOCOL (p. 141)
08:45	Flaminio K	PHARMACOKINETICS OF A SINGLE DOSE OF CEFOVECIN IN AFRICAN LIONS (Panthera leo) FOLLOWING SUBCUTANEOUS ADMINISTRATION (p. 143)
09:00	Stalis I	VENO-OCCLUSIVE DISEASE IN CAPTIVE CHEETAHS (<i>Acinonyx jubatus</i>) REVISITED: A MULTI-DISCIPLINARY PERSPECTIVE AT THE SAN DIEGO ZOO SAFARI PARK (p. 145)
Session chairs	Sos E Padilla L	AZA/EAZA Vet Advisors IV
09:15	Garner MM	DISEASE TRENDS IN MANAGED POPULATIONS OF THE ENDANGERED BLACK- FOOTED FERRET (<i>Mustela nigripes</i>) (p. 147)
09:30	Hammond EE	MANED WOLF (Chrysocyon brachyurus) SPECIES SURVIVAL PLAN® MEDICAL UPDATE (p. 149)
09:45	Wack RF	DISCOVERY AND PRELIMINARY CHARACTERIZATION INCLUDING VIRAL SHEDDING PATTERNS OF A NEW AMDOPARVOVIRUS INFECTION IN A GROUP OF RED PANDAS (<i>Ailurus fulgens</i>) (p. 152)
10:00		Coffee break
Session chairs	Howard L Hermes R	Elephant and Rhino
10:30	Ts R	SUCCESFUL MANAGEMENT OF GASTROINTESTINAL IMPACTION IN THREE ASIAN ELEPHANTS (<i>Elephas maximus</i>) IN CAPTIVITY BASED ON THE CLINICAL PROTOCOL FIXED FOR THE DISEASE (p. 153)
10:45	Bechert U	PHARMACOKINETICS OF FLUNIXIN MEGLUMINE IN ELEPHANTS (Loxodonta africana AND Elephas maximus) (p. 157)
11:00	Citino S	INVESTIGATION OF A Q FEVER OUTBREAK IN A BREEDING HERD OF WHITE RHINOCEROS (<i>Ceratotherium simum</i>) (p. 159)
11:15	Rose JB	MANAGEMENT OF TRAUMATIC TUSK FRACTURES IN AFRICAN ELEPHANTS (<i>Loxodonta africana</i>): A 22-YEAR RETROSPECTIVE REVIEW AT A NORTH AMERICAN ZOOLOGICAL FACILITY (p. 160)
11:30	Kishbaugh J	EVALUATION OF PLATELET TRANSPORT IN ASIAN ELEPHANTS (<i>Elephas maximus</i>) AS PART OF AN ONGOING STUDY TARGETING NOVEL EEHV-HD TREATMENT (p. 161)
11:45	Ruetten M	CAN IRON STORAGE DISEASE BE INDUCED BY A CHRONIC INFECTION SUCH AS TUBERCULOSIS IN ASIAN ELEPHANTS (<i>Elephas maximus</i>)? (p. 163)
12:00	Wissink-Argilaga N	EARLY EEHV-1B DETECTION AND SUCCESSFUL TREATMENT OF EEHV-HD IN AN ASIAN ELEPHANT CALF (<i>Elephas maximus</i>) (p. 164)
12:15		CLOSING CEREMONY
13:15		Lunch packages
13:15 - 20:00		Free time to explore Prague or watch an Albatross documentary (Meeting Room 10)
13:30 - 15:00		Kolmarden conference meeting (Meeting Room 14) Zebra foundation meeting (Meeting Room 15)

POSTERS

LABORATORY INDICATORS OF DISEASE IN WHITE-BELLIED TREE PANGOLIN (<i>Phataginus tricuspis</i>)
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SIGHTSEEING

Prague is among the most beautiful cities in Europe, with a rich architectural history dating back to 800 AD, an active cultural scene, some 26,000 trees turning golden in autumn, and features 88 protected natural spaces in or near the city. Here are some tips on what to see, do, or explore on your own time:

City, History and Architecture:

Prague's historical quarters each have their own character with distinct buildings, styles and atmospheres.



Prague Town Houses; © Monica Volpin

The medieval **Old Town** is centred on the historic market place and Prague's **astronomic clock**. Places of note are the **Klementinum**, one of the largest building complexes in Europe – first a Dominican monastery later a university – including the Astronomic tower and Prague's baroque library; and the **Powder Tower** – one of the 13 historic entrances to the city. Here you'll also find cafés and shops, but also quiet side streets to escape the city hustle – if you like exploring a city by just taking a random street and see what you discover, this is your place. Nearby is Prague's **Jewish Quarter**, a calmer space than the busy Old town, with a number of Synagogues and the Jewish Cemetery.



Library at the Klemtinum; © izoca / pixabay

Malá Strana ('Lesser Town'), on the opposite side of the river stretches up to the castle and features Baroque buildings, historic churches, noble palaces, parks and gardens, views over Old Town and some very narrow streets winding uphill. Craftsmen and merchants settled here, next to the Castle, in the late 17 hundreds and the architecture reflects their more affluent status. The well-known **Charles Bridge**, featuring 30 statues connects the Lesser Town to Old Town.



Charkes Bridge (Karlův most); © Ryan Lum

Prague Castle, on top of Castle Hill, is the largest castle complex in the world, covering some 70,000 square meters. First founded in 870 and expanded and remodelled frequently since, it collects buildings of a huge variety of architectural styles. Halls of the nobility, Basilicas, Prague's Cathedral and the Castle itself all belong to the complex.

Vyšehrad ('upper castle'), around 3 km south of Old Town is less touristic then the other quarters. Regardless, with its old fort, some of the oldest rotundas of the city, its own set of parks and churches, river and city views it also encapsulates and reflects much of the city's history. It is also a part of the city with some of the biggest architectural contrasts from the historic buildings to Czech architectural Cubism – the area around **Kovařovic Villa** – to some remains of Soviet history and influence (Prague Congress Centre).

Parks, Nature, Walking and Cycling:

Petřín in the middle of Prague is a hill brimful with parks, gardens and orchards, and offers great views over the city. **The Rosarium** and **the Seminary Garden** – with more than 2100 fruit trees – are especially noteworthy. If you don't feel like walking **The Petřín Funicular** runs all the way to the top of Petřín in a 10 minute interval from Malá Strana district. **Petrinska rozhledna** (Petrin Lookout Tower) on top of the hill is often described as a small version of the Eifel Tower. **The Mirror Maze, the Hunger Wall** – a medieval defence wall – the Romanesque **Cathedral of Saint Lawrence**, and an astronomical observatory – **Štefánikova hvězdárna** (Stefanik's Observatory) – are all also located on Petřín.



Petřín; © Peter Tóth

Divoká Šárka ('Wild Šárka'^[1]) is a Nature Reserve at the edge of the city, some 30 minutes by public transport. A wooded valley cut through by a stream, small but rocky hills to climb for views over both the city and the surrounding land and many bike and hiking paths. Bring sturdy shoes as paths are unpaved and partially steep.



Divoká Šárka; Wikipedia

¹ The legend of Šárka is among the most popular in Czech folklore and mythology: After the death of Queen Libuše, the last of a long line of martriachs, a civil war saw women and men pitched against each other. Šárka, one of the Amazonian Warriors, used trickery to kill Ctirard, the greatest fighter of the opposing all-male army. Full of regrets she later committed suicide by leaping of dívčí skok (maiden's jump) - a rocky outcrop in the area of today's reserve. With the end of the war, patriarchal rule and a feudal system under the Prmyslid dynasty was installed. There is no historical evidence that any facet of the myth is actually true; but it was popularised during the Czech National Renewal, a patriotic movement under the Habsburg rule and is now part of the Czech cultural landscape.

Prague has two Botanical Gardens. The smaller, **the Botanical Garden of the Natural Sciences Faculty of Charles University**, is located near the city centre. First founded in the 1400s it was relocated several times and is in its current location since 1835. Today the 3.5 ha are open to the public but also serve as a teaching and study area for the university. At the Northern end of the city, **Praque's Botanical Garden** was established in 1968, and opened to the public in 1992. Part of the 70 ha area is used for scientific research into protecting natural sites and 12 ha of the park are designated as a nature reserve. The public part of the part includes the **Fata Morgana greenhouse**, simulating different environments; central-American savannahs and South-African semi-deserts, tropical rainforests (including a seven metre waterfall), and the environment of the Andes and the Cape in an artificially cooled part of the Greenhouse.

Museums, Festivals and Events:

The **National Gallery Prague** holds the largest art collection in the Czech Republic, stretching from paintings of the Middle Ages to Modern and Contemporary Art of the 19th, 20th and 21st centuries. Unlike many other art galleries the collection is housed in a number of historic buildings across Prague, including the **Convent of St. Agnes of Bohemia**, **Waldstein Riding School** and **Kinsky Palace**. You can visit specific buildings or buy a combined ticket.

Prague's **National museum** (Národní museum) combines, just as the National Gallery a number of different buildings focusing on various natural or social science aspects each. While the historical building of the National museum is still closed for renovations until the end of October, the **New Building of the National Museum** (Národní muzeum – Nová budova) displays a small proportion of the museums natural history collection. **Hrdlička Museum of Man** examines the evolution of humanity. This free, small and cosy University museum is right next to the Botanical Garden. **National Museum of Agriculture** explores both the past but also the future of our relationship with nature. It currently also hosts part of the **Czech Nature Photo 2018** exhibition.

Signal Festival, October 11th to 14th: This international festival of light art and emerging technologies brings installations to public spaces across Prague. Ranked as one of the best illumination festivals worldwide it allows you to explore Night-Time Prague between seven PM and midnight. Tickets to get close to the interactive installations are 150 CZK. More Information and impressions of past festivals at *signalfestival.com/en/*.

Many more events, including concerts, can be found at goout.net/en/prague/events/.

ORGANISATION

The **2018** Joint EAZWV/AAZV/Leibniz-IZW Conference is organised by the European Association of Zoo and Wildlife Veterinarians (EAZWV, Liebefeld-Berne, Switzerland), the American Association of Zoo Veterinarians (AAZV, Yulee, Florida, USA), and the Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW, Berlin, Germany), in cooperation with Prague Zoo (Prague, Czech Republic).

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Lucie Šašková Roman Vodička Jaroslav Šimek

CONTACT



Contact: Lucie Šašková

171 00 Praha 7

Czech Republilc

U Trojského zámku 120/3

E-Mail: saskova@zoopraha.cz

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Leibniz Institute for Zoo and Wildlife Research

Contact: Josepha Prügel, Steven Seet Alfred-Kowalke-Straße 17 10315 Berlin Germany

> E-Mail: 2018@zoowildlifehealth.org Phone: (+49) 30 51 68 127 (Prügel) Mobile: (+49) 177 857 26 73 (Seet) Fax: (+49) 30 51 26 104



Contact: Robert Hilsenroth 581705 White Oak Road Yulee, FL 32097 USA

Phone: (904) 225-3275 Fax: (904) 225-3289 E-Mail: admin@aazv.org



Contact: Hanspeter Steinmetz Walter Zoo Neuchlen 200 9200 Gossau Switzerland

E-mail: president@eazwv.org

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Editing and layout:	Christof Häberle, Stefanie Lenz, Josepha Prügel
Cover:	Przewalski's horse, © Tomáš Adamec
Printing:	copy print Kopie & Druck GmbH, printed on recycled paper
Publisher:	Leibniz Institute for Zoo and Wildlife Research (IZW), Post office box 700430, 10324 Berlin, Germany, www.izw-berlin.de

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