AZVT Presentation Title History

Titles of previously presented posters, presentations, round table discussions, and wet labs from past years - to reference for future presentations. Please review this information when deciding on your topic. Some topics are rather popular and often brought up for presentation. In the interest of keeping things fresh and sharing new information, the Editorial Committee will evaluate the submitted topic and evaluate whether or not it has been presented too much in the recent past.

Please keep in mind that if a topic has been covered frequently in the recent past, you may be asked to rethink your subject matter or asked to wait for another year.

42nd Annual Meeting – 30 October - 4 November, 2022
Reid Park Zoo – Tucson, Arizona

PRESENTATIONS
Note: (P) denotes full paper; (A) denotes abstract only

Treatment of a Pyometra in a Well Trained Critically Endangered Amur Leopard (Panthera pardus orientalis) (A) Sohl & Ayrault

Successful Rehabilitation Following a Traumatic Beak Amputation in a North Island Brown Kiwi (Apteryx mantelli) (A) Cockrell

Ruptured Air Aacs in Avian Species (2022 LPP Scholarship Winner) (P) Beard

Managing a Degloving Injury of a Red-Rumped Agouti (Dasyprocta leporina): Challenges to Continuity of Care (A) Maldonado & Gray

Euthanasia Due to Progressive Urogenital Carcinoma in a California Sea Lion (Zalophus californianus) Caused by Otarine Herpesvirus 1 (P) Burmeister

The Importance of Dark Skies and the Need to Combat Light (A) Orlando

Early Aggressive Treatment of EEHV1A in an Asian Elephant (Elephas maximus) Calf and the Importance of Serology and PCR Testing (A) Mccrae

Influence of Herd Size and Animal Transfers on Shedding Frequency and Quantity of Elephant Endotheliotropic Herpesvirus in Asian Elephants (Elephas maximus) (A) D'Agostino

Zoo Dental Radiography: A Guide for Veterinary Professionals (A) Chapin

Theories and Reality of Exotic Animal Crossmatching (A) Lafarga

Intraoperative Management of an Intracranial Abscess Debridement of a Bonobo (Pan paniscus) (A) Chanthalangsy

Post Operative Management of Brain Surgery in a Juvenile Bonobo (Pan paniscus) (A) Croce

The Unusual Anatomy of Australian Monotremes - Part II (A) Tochterman
Abnormal White Blood Cell Review  

Stacy & Arnold

Solving the Mystery of Estimated White Blood Cell Counts  

(P) Arnold

Necropsy Sampling Techniques: Preparing Samples for Histology Processing  

(A) Walsh

Conquering Avian Cholera: Audubon Zoo's Preparation and Management of an Avian Cholera Outbreak  

(A) Starkey

Dental Challenges in Exotic Animals  

Winckler

The Art of Establishing Boundaries to Sustain a Healthy Career  

(A) Mcnally

Pharmaceutical Reverse Distribution for Zoos  

(A) Riecklen & Ghormley

Comparison of Selected Blood Analytes Obtained by Istat®, Two Laboratory Analyzers, and Manual Techniques in Wild Florida Manatees (Trichecus manatus latirostris)  

(A) Adler

Distribution, Diagnoses, and Prevention of Echinococcus Multilocularis in Zoo Environments  

(P) Shahab

An Overview of Pythiosis: A Fungal-Like Infection of Concern  

(A) Hoskinson

Placenta Previa in a 39-Year-Old Western Lowland Gorilla (Gorilla gorilla gorilla) at Zoo New England  

(A) Orlando

POSTERS

note: (p) denotes full paper; (a) denotes abstract only

Amphibian Fluid Solutions: Formulations and Storage  

(A) Frum

Blood Transfusions: A Quick Reference Guide  

(P) Lydick

WET LABS

Blood Crossmatching Wet Lab  

Lafarga

Urinary Catheter Placement Wet Lab  

(A) Croce
PRESENTATIONS

Note: (P) denotes full paper; (A) denotes abstract only

Blood Gas Analysis in Mammalian and Avian Patients: The Value of Point of Care Devices and a Need for More Data (A) Jones

Megacolon Treatment, Subsequent Colonic Resection with Anastomosis, and Management in a Red Tegu (Salvator rufescens) (A) Bonanni

Avian and Reptile Hematology: Highlights and Cases Stacy

Aspergillosis in Veterinary Medicine: Aspects of Biology and Diagnostics (A) Cray

Pzp Immunocontraception in Zoos (A) Frank

The Poke of Comfort – Acupuncture in Zoo Medicine (A) Harrison

Haemosporidian Parasites and Treatment in Captive Common Eiders (Somateria mollissima) (A) Cockrell

The Unusual Anatomy of Australian Monotremes (A) Tochterman

Follow The Swallow: A Practical Overview of Dysphagia for Zoo Veterinary Technicians (P) Hurley

Effect Of Therapeutic Laser as a Multimodal Approach to Treatment of Dermal Abrasions in the Cownose Ray (Rhinoptera bonasus) (A) Gilewski

The Application of High-Definition Volumetric Imaging Computed Tomography in Zoo Medicine (A) Monti & Brittingham

Successful Removal of a Type B1 Thymoma From a 10-Year-Old Female Red Panda (Ailurus fulgens styanii) (P) Nickolopoulos

Pest Management In Zoos: How and Why Veterinary Technicians Play an Important Role (A) Huber

Treating Anticoagulant Rodenticide Toxicity with Blood Transfusions in Red-Tailed Hawks (Buteo jamaicensis): Three Case Studies (P) Simpson

Storing, Maintaining, and Archiving Biological Samples: Alternative Methods and Collaborations (P) Dragoo

Harnessing Welfare Assessment Tools to Move From Compassion Fatigue to Compassion Satisfaction in Animal Caretakers (A) McNally

Treating Heartworm (Dirofilaria immitis) in a Maned Wolf (Chrysocyon brachyurus) (A) Wesselmann
Managing Arthritis in a Dromedary Camel (*Camelus dromedarius*) Using Multimodal Therapy

Anticoagulants: Why That Tube for That Animal for That Test

Fungal Air Sampling Program at The Maryland Zoo in Baltimore to Monitor *Aspergillus* Species Exposure in an African Penguin (*Spheniscus demersus*) Colony

The Challenges and Advantages of Implementing In-House Blood Analysis in a Zoo Setting

Veterinary Preparedness and Emergency Response to Australian Native Wildlife Impacted by Fire Events in Victoria, Australia

**POSTERS**

*Note: (P) denotes full paper; (A) denotes abstract only*

Application of Urinary Catheterization in Zoo Medicine

**WET LABS**

Necropsy Wet Lab
Shocking! Electric Eel (*Electrophorus electricus*) Restraint, Anesthesia, Anatomy, and Water Quality Challenges  (P)  McMurrer

Elasmobranch Anesthesia: An Overview  (P)  Barron

Cliffside Phlebotomy, Cryo-Shippers and More: A Crash Course in Field Research with Gentoo (*Pygoscelis papua*) and Southern Rockhopper (*Eudyptes chrysocome*) Penguins in the Falkland Islands  (A)  Cambell

Giant Manta Ray (*Manta birostris*) Exams: Sample Collection and Processing  (P)  Kliesrath

Diagnostics and Treatment Protocols in Response to an Acute Mortality Event in Sea Urchins (*Strongylocentrotus* spp., *Mesocentrotus franciscanus*)  (P)  Dunleavy

Lactate Meter: An Underutilized Tool for Assessment of Hypoperfusion  (P)  Merkel

Making a Safe Zoo Safer  (A)  McNally

How, What, and Why of Acute Phase Protein Testing  (A)  Cray

RECOVER: Bringing an Evidence Based Reassessment Campaign on Veterinary Resuscitation (RECOVER) Initiative to a Zoological Facility  (A)  Bartolini

Avian Respiratory Disease: The Case of a Dyspneic Goose (*Anser anser domesticus*)  [2020 LPP Scholarship Winner]  (P)  Cooper

The Struggle was Real: Managing a Young Southern White Rhinoceros (*Ceratotherium simum simum*) with Multiple Health Issues  (A)  Sohl & Studer

Excision of a Salivary Gland Adenoma and Post-Operative Care in a North Island Brown Kiwi (*Apteryx mantelli*)  (A)  Cockrell

Postoperative Care and Physical Rehabilitation Following a Hemilaminectomy in a Young Adult Brown-Nosed Coati (*Nasua nasua*)  (P)  Wilson

A Survey of Blood Lead Levels in Black Kites (*Milvus migrans govinda*) as a Model for Predicting Levels in the Critically Endangered White-Rumped Vulture (*Gyps bengalensis*) in Ahmedabad, India  [Full paper presented in 2019]  (A)  Rendle

Presumptive Campylobacter-Associated Guillain-Barre Syndrome in a Coquerel’s Sifaka (*Propithecus coquereli*)  (A)  Mott & Miller

So you Have a Young Elephant… What you Need to Know About Elephant  (A)  Latimer
Endotheliotropic Herpesvirus (EEHV) Monitoring and Diagnostics

Conservation Translocations of Fishers (*Pekania pennanti*) from Alberta to Washington State, and the Veterinary Contributions in Between  
*Peccie*  

Crossmatching Blood from Asian Elephants (*Elephas maximus*) at the Houston Zoo: A Review of the Methodology and Challenges  
*Atkinson*  

Non-Lethal Solutions to Wildlife Management in Zoos: Starting with Raccoons (*Procyon lotor*)  
*Brittingham*  

Presentation of Chronic Draining Abscesses in Two Kunekune (*Sus scrofa scrofa kunekune*)  
*Nickolopoulos*  

Audubon Research Projects as a Model for Student Collaborations Impacting Avian Conservation  
*Little*  

Mental Health as it Pertains to Zoo Veterinary Technicians  
*McNally*

**POSTERS**

*Note: (P) denotes full paper; (A) denotes abstract only*

Development of a Weighted Arness for a Positively Buoyant Green Sea Turtle (*Chelonia mydas*): A Multi-Department Collaboration  
*Gilewski*  

Applications of a Portable Computerized Tomography Scanner in a Zoo Setting  
*Thompson*  

Survey of Canine Distemper Virus in Free Ranging Raccoons (*Procyon lotor*) in Northeastern Illinois  
*Simpson*  

**WET LABS**

Organize Your Curiosity: How to Write in Science  
*Camillo*  

Getting the Most Out of the Sample Storage Module of ZIMS Software  
*Teare*  

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**39th Annual Meeting – 22-27 September, 2019**  
Cheyenne Mountain Zoo – Colorado Springs, Colorado

**PRESENTATIONS**

*Note: (P) denotes full paper; (A) denotes abstract only*

No, OSHA is Not a Small City in Wisconsin: Safety and Health Regulations for Zoo Veterinary Staff  
*Gallagher*  

A Veterinary Nurse’s Role in Health and Welfare of Geriatric Zoo Animals at ZSL London Zoo  
*Sparrow*
Voluntary Therapeutic Large Volume Phlebotomy of Ex-Situ Black Rhinocerouses (*Diceros bicornis*) for the Treatment and Prevention of Iron Overload Disorder

(P) Nelson

Obesity of Reptiles in Managed Care

(P) Munakata

A New Three Step Method to Healing Wounds in a Zoo Setting

(A) McLeod

A Novel Treatment for Subsolar and Digital Abscesses Utilizing an Epoxy Patch System in Asian Elephants (*Elephas maximus*)

(A) Keating

Life in the Slow Lane: My Time with the Sloth Institute of Costa Rica

[2017 AZVT Grant Recipient]

(P) Heinze

Medical Management of Captive Eastern Indigo Snakes (*Drymarchon couperi*) Infected with *Cryptosporidium serpentis*

(A) Dickerson

How our Waste can be Used to Help Animal Rescues and Sanctuaries Around the Globe

(A) Tarwater

Polar Bear (*Ursus maritimus*) Conservation Efforts at Assiniboine Park Zoo

(P) Majure

Heeding the Call: Global Emergency Response to Wildlife Trafficking in Madagascar

[2018 AZVT Grant Recipient]

(P) Walsh

Saving the Orange-Bellied Parrot (*Neophema chrysogaster*) from Extinction

(A) Rice

Malignant Cattarrhal Fever: An in Depth Review

(P) Rocca

Common Reptile Emergencies

Klaphake

Live Animal Logistics

(A) Arimborgo

A Literature Review of the Physiological Effects of Electrofishing on Fish and Amphibians

[2019 LPP Scholarship Winner]

(P) Blose

Cytology Features of Inflammation and Neoplasia in Your Creatures

(P) Pond

Scanning Electron Microscopy and Transmission Electron Microscopy: Applications in Veterinary Medicine

(A) Maurer

Comparison of Fibrinogen and Erythrocyte Sedimentation Rate with Commonly Utilized Inflammatory Indices as Part of the Hematological Profile in the African Penguin (*Spheniscus demersus*)

(A) Gilewski

A Survey of Blood Lead Levels in Black Kites (*Milvus migrans govinda*) as a Model for Predicting Levels in the Critically Endangered White-Rumped Vulture (*Gyps bengalensis*) in Ahmedabad, India

(P) Rendle

Utility and Efficacy of Mesenchymal Stem Cell Therapy for Wounds and Osteoarthritis

(A) Johnson
### Evaluating Performance of Blood Testing Devices

(P) Arnold

### Diagnostic Testing of Haemospridian Infections in African Penguins (*Spheniscus demersus*) During Rehabilitation in South Africa

(A) Zietz

### Cesarean Section of 0.1 Sumatran Orangutan (*Pongo abelii*) with Subsequent Hand Rearing and Successful Reintroduction of Offspring

(P) Schwenzer

### Case Management of a Luxated Flexor Tendon in an African Penguin (*Spheniscus demersus*)

(A) Youngclaus

### Emergency Caesarean Section in a Giraffe (*Giraffa camelopardalis*)

(A) Young

### Successful use of Becaplermin Gel on a Chronic, Progressive, Ulcerative Skin Wound in a Cross River Puffer (*Tetraodon pustulatus*)

(A) Czudak

### A Curious Case of Atypical Brucellosis

(P) DeBoef

### Neuromuscular Blocking Agents and Anesthetic Monitoring of Western Lowland Gorillas (*Gorilla gorilla gorilla*) Undergoing Laparoscopic Surgery

(P) Romanoski

### An Overview of the Imaging Modalities and Protocols Used to Study and Monitor the Vulnerable African White-Bellied Pangolin (*Phataginus tricuspis*)

(A) Jannasch

### Cytology Wet Lab

Pond

### Medical Behavior Training

Hester

### Zoo Hoofstock Trim Program

Foxworth

### 38th Annual Meeting – 25-29 August, 2018

**Columbus Zoo and Aquarium -- Columbus, Ohio**

### PRESENTATIONS

Note: (P) denotes full paper; (A) denotes abstract only

(P) Gilewski

(P) Landacre
Cats from the Wild: Stories of Rehabilitation of Florida Panthers (*Puma concolor coryi*) at ZooTampa at Lowry Park  
(A) Henry

Clinical Indications for Caesarean Section: A Case Study in an Allen’s Swamp Monkey (*Allenopithecus nigroviridis*) at the Kansas City Zoo  
[2018 Recipient, Laurie Page-Peck Scholarship]  
(P) Flippin

(A) Arnold

Conservation Medicine/One Health—Gorilla Doctors and The Wilds  
(A) Ramer

Diagnosis and Management of Exocrine Pancreatic Insufficiency in a Slender-Tailed Meerkat (*Suricata suricatta*)  
(A) Duncan

Enhancing Giraffe Preventative Medicine Through Collaborative Efforts and Advanced Training Programs  
(A) Bapodra-Villaverde

Giraffes Galore! From 2 to 10 in 3: A Small Zoo’s Journey to Advanced Medical Care  
(A) Davis

Have You Hugged Your Bear Today? And Should You? Animal Welfare in the Zoo Setting  
(A) Junge

Management of Chronic Weight Loss in an Addax (*Addax nasomaculatus*): The Case of an Opportunistic Infection  
(P) Aubuchon

Medical Management and Acclimation of Former Research Baboons into Troops in a Sanctuary Setting  
(P) Tarwater

Preventative Health Program for Monitoring Monogenean Parasite Infections in Leopard Sharks (*Triakis semifasciata*) at Monterey Bay Aquarium  
(P) Young

Rehabilitating a Juvenile Bald Eagle (*Haliaeetus leucocephalus*) with Nerve Damage  
(A) Little

Same Enclosure, Different Approach: How to Modify Your Technique to be Successful  
(A) McNally

The Maryland Zoo in Baltimore’s Avian Malaria Monitoring and Treatment Program in African Penguins (*Spheniscus demersus*)  
(A) Sohl and Studer-Green

Tissue Healing: Understanding the Process is Critical to Effective Wound Management  
(P) Lydick

Treatment of Soft-Tissue Sarcoma in a Jaguar (*Panthera onca*) Using Stereotactic Radiation  
(P) Romanoski

Two Diseases, One Corner, and Loads of Potential for Cross-Contamination: Featuring *Ophidiomyces ophiodiicola* and *Cryptosporidium serpentis*  
(A) O’Brien

Use of Fentanyl Transdermal Systems as a Method of Pain Management in a Black Mamba (*Dendroaspis polylepis*)  
(P) Walosin

You Help Me, I Help You: Data Collection for Informed Use of Contraception  
(P) Franklin
POSTERS
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The Animal Care Center at Monterey Bay Aquarium: Justifying the Need for More Space (A) Young

The ZRA Training Certificate Program and How it Benefits You in the Zoological Registrar Role (A) Roach (Arimborgo)

WET LABS

Cytology Basics: Inflammation Versus Neoplasia Pond

Darting Lab Ramer

Fish and Elasmobranch Blood Cell Morphology Arnold

ROUND TABLE DISCUSSIONS

AZA Reproductive Management Center Round Table Franklin

PRESENTATIONS
Note: (P) denotes full paper; (A) denotes abstract only

Chasing the Elusive Mountain Tapir (Tapirus pinchaque): Conservation in the Paramo (A) Wilfong

Coping with Errors and Unanticipated Outcomes in Zoo Medicine / Self-Care for Zoo Medicine Technicians (P) Holowaychuk

Diagnosis and Management of Polycystic Kidneys in an African Lion (Panthera leo krugeri) (A) Corbus

Fish Diseases (A) Haulena

Good Vibrations: Vibration Therapy in a Sand Impacted Desert Tortoise (Gopherus agassizii) (A) Weidner

In-House Polymerase Chain Reaction: Lab Setup, Reaction Basics and Advantages for Screening Elephant Endotheliotropic Herpes Virus (EEHV) (A) Jones

Lip-to-Lid Transposition of Eyelid Coloboma and Post-Surgical Management in a Litter of Snow Leopard Cubs (Uncia uncia) (A) Freudenthal

Management and Diagnosis of Ventricular Adenocarcinoma in a Humboldt Penguin (A) Aemmer

37th Annual Meeting – 5-8 September, 2017
Edmonton Valley Zoo -- Edmonton, Alberta, Canada
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<tr>
<td>Management Challenges Using Open Water Systems: Case Studies on Smooth Lumpsuckers (<em>Aptocyclus ventricosus</em>) and the Alaska Blackfish (<em>Dallia pectoralis</em>)</td>
<td>Belovarac</td>
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<td>Marine Mammal Anesthesia</td>
<td>Haulena</td>
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<td>Monitoring Controlled Substance in a Busy Zoo Setting</td>
<td>Castro</td>
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<td>Oronasal Fistula Management in the Victoria Koala (<em>Phascolarctos cinereus victor</em>)</td>
<td>Rice</td>
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<td>Rehabilitative Care and Hand-Rearing in a Colony of Spectacled Flying Foxes (<em>Pteropus conspicillatus</em>) Seasonally Affected by Paralysis Ticks (<em>Ixodes holocyclus</em>) in Australia</td>
<td>Eidlin</td>
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<td>Saving Endangered East African Grey Crowned Cranes (<em>Balearica regulorum gibbericeps</em>)</td>
<td>Peirson</td>
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<td>Stem Cell Therapy in Zoological Medicine</td>
<td>McCrae</td>
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<td>The Care and Feeding of Externs: What a Veterinary Technician Student Extern Can do for You</td>
<td>Hoskinson</td>
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<td>The Ocular Lens in Zoo Medicine: Anatomy, Physiology, and Common Pathologies</td>
<td>Monti</td>
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<td>Toxoplasmosis in Bennett’s Wallaby (<em>Macropus rufogriseus</em>)</td>
<td>Rooker</td>
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<td>Transitional Cell Carcinoma in a Linne’s Two-Toed Sloth (<em>Choloepus didactylus</em>)</td>
<td>Merkel</td>
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<td>Understanding Cardiomyopathy: An Overview</td>
<td>Olsen</td>
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<td>Utilization of Targeted Pulse Electromagnetic Field (tPEMF) Therapy in Treatment of a Refractory Wound in a Zebra Shark (<em>Stegostoma fasciatum</em>)</td>
<td>Cochran</td>
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**POSTERS**

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<tr>
<td>Who Knew You Could Train a Kudu: The Use of Operant Conditioning to Manage Hoof Health in a Lesser Kudu (<em>Tragelaphus imberbis</em>)</td>
<td>Brubaker</td>
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**WET LABS**

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<td>How to Thrive (Not Just Survive) as a Zoo Medicine Technician</td>
<td>Holowaychuk</td>
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<td>Incorporating Veterinary Services into Behavioral Training for Medical Procedures</td>
<td>Castor</td>
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PRESENTATIONS

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Bilateral Cataract Removal via Phacoemulsification with the Use of Endolaser and Implanted Custom Made Lenses on a Jaguar (*Panthera onca*)  (A) McNally

Care and Medical Management of a Chronic Foot Lesion in a Southern Isabela Tortoise (*Chelonoidis nigra vicina*) with a Prosthetic Boot and Vacuum-Assisted Wound Closure  (A) Jones

Correlation of Previous and Concurrent Disease Process with Computed Tomography (CT) Images and Post-Mortem Findings in a Prevost’s Squirrel (*Callosciurus prevostii*)  (P) Schwenzer

Degradation of Hematology Samples Over Time and the Effects on Complete Blood Count Results in Mammals, Birds and Reptiles  (A) Trotta-Hissrich

Determining the Prevalence of *Dirofilaria immitis* in American Black Bears (*Ursus americanus*) in Mississippi  (P) Hoskinson

Development of Portable Molecular Diagnostic Technology for Canine Distemper Virus Detection in Endangered Carnivores Diagnosis and Management of Renal Disease and Osteoarthritis in a Geriatric North American Cougar (*Puma concolor*)  (A) Ortiz

Eastern Equine Encephalomyelitis Virus in Southern Cassowary (*Casuarius casuarius johnsonii*) at the Virginia Zoo  (A) Rooker

Fintastic! Teleost Nursing Techniques  (A) Fleming Jones

In-House Techniques to Detect Iron Deposits on Tissue Cytology in Avian Species Prone to Iron Overload Disorder  (P) Walsh

[2016 Recipient, Laurie Page-Peck Scholarship]

Innovations in Gas Anesthesia in a Remote Field Setting  (A) Runnells

Knowing Your Platelets: The Role of Platelets in Elephant Endotheliotropic Herpesvirus and Routine Monitoring Method to Aid in Early Detection in Asian Elephants (*Elephus maximus*)  (P) Pich

Management of Amphibian Cloacal Tissue Prolapse with an Overview of Anesthesia, Surgery, and Patient Care  (P) Woods

Medical Management of a Suspected Viral Thyroiditis in a Female Western Lowland Gorilla (*Gorilla gorilla gorilla*)  (A) McCrae

Multimodal Therapies to Treat Chronic Arthritis in the Fetlock of a Reticulated Giraffe (*Giraffa camelopardalis reticulata*)  (P) Mott
Nursing Care of the Koala (*Phascolarctos cinereous*) (A) Turnage

Ocean Plastic: A Deadly Diet (A) Montgomery

Persistent Right Aortic Arch in a Giraffe (*Giraffa camelopardalis*) (A) McCrae

Physical Rehabilitation of an Acutely Paretic Maleo (*Macrocephalon maleo*) (P) Chin

Principles and Best Practices for a Zoo Animal Neonatal Care Unit (P) Hedberg

Real Time Global Resources Changing Zoological Medicine (P) Teare

Surveillance for Viral and Parasitic Pathogens in a Vulnerable African Lion (*Panthera leo*) Population in the Northern Tuli Game Reserve, Botswana (A) McDermid

The Case of the Three Bears: Continued Learning and Experience in Hand-Rearing Neonatal Polar Bears (*Ursus maritimus*) at the Toronto Zoo (A) Mihailovic

The Role of the Zoological Veterinary Technician in a Conservation Success Story (A) Zietz

Wild Wednesday - How to Shine the Spotlight on Your Zoo (A) Taylor

**POSTERS**

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Cryotherapy for a Casque Mass in a Violet Turaco (*Musophaga violacea*) (P) Woods

Designing an Online Hand-Rearing Resource Center: The First Steps (A) Hedberg

Horseshoe Crab (*Limulus polyphemus*) Review (A) McMillen

**WET LABS**

A Comparative Analysis of Elephant Hematology Sohl

Elephant Reproductive Tract Anatomy and Physiology with Ultrasound Exam: Basics of Semen Quality Assessment and Processing Kiso

Organize Your Curiosity: How to Write in Science Camillo

**ZIMS**

1. Introduction to ZIMS for Medical
2. ZIMS Tests and Results in Depth Teare
35th Annual Meeting -- 9–12 September, 2015
Point Defiance Zoo & Aquarium -- Tacoma, Washington

PRESENTATIONS
Note: (P) denotes full paper; (A) denotes abstract only

A True Trooper: Successful Treatment of Capture Myopathy in a Lesser Flamingo (*Phoeniconaias minor*) Through Multi-Modal Drug Therapy and Physical Rehabilitation

Quataert

Diagnosis and Medical Management of Autoimmune Disease in a Juvenile African Elephant (*Loxodonta africana*)

Galvanek

Diagnosis of *Mycobacterium tuberculosis* in 1.0 Eastern Black Rhinoceros (*Diceros bicornis michaeli*), and Subsequent Testing and Monitoring of Remaining 1.2 Black Rhinoceros and Animal Care Staff

Plummer

Diagnostic Metagenomics - An Emerging Tool in Monitoring Fish Health

Haman

Do You Know What’s Growing in Your Exhibits? Ten Toxic Plants to Avoid

Burmeister

Hemochromatosis: An Overview of Disease Diagnosis, Treatment, and Clinical Management in a Population of Atlantic Bottlenose Dolphins (*Tursiops truncatus*) at the National Aquarium

Steinert

How to Prepare for an AZA Inspection, and Survive!

Ortiz

Improvements to Animal Health Care Through the Use of Operant Conditioning for Intravenous Induction of Anesthesia at the Oregon Zoo

Harvison

Inflammatory Bowel Disease in the Red Wolf (*Canis rufus*): An Emerging Concern

Wolf

Inhalant Anesthesia in an Adult Reticulated Giraffe (*Giraffa camelopardalis reticulate*)

Wilfong

Laminitis in Exotic Hoofstock

Wiedner

Marine Mammal Field and Deployment Medicine

Lutmerding

Medical and Behavioral Management of Chronic Psychogenic Alopecia in a Jaguar (*Panthera onca*)

Aemmer

Ocular Prostheses Trials in Marine Fish

Anderson

Outcomes of the AZA Workshop on Infertility and an Introduction to Lifetime Reproductive Planning

Agnew

Pneumocoelom in a Green Sea Turtle (*Chelonia mydas*)

Coy

Release of a Snowy Owl (*Bubo scandiacus*) at the Maryland Zoo in Baltimore in Conjunction with Project SNOWstorm

Brittingham
Slow Bolus Administration of Parenteral Nutrition for the Treatment of Chronic Debilitation in Sea Turtles (A) Montgomery

Surgical Repair of Tibial Fracture in a Juvenile Red Kangaroo (*Macropus rufus*) with Minimal Aftercare Required - [2015 Recipient, LPP Scholarship] (P) Olmedo

The Challenges of Critical Care Through Protected Contact: A Case Study of a North American River Otter (*Lontra canadensis*) (A) Studer

The Cornea in Zoo Medicine: Anatomy, Physiology, and Common Keratopathies (P) Monti

The Effects of Housing in a Communal Barn on Concentrations of Stress and Reproductive Hormones in Female Giant Anteaters (*Myrmecophaga tridactyla*) [2013 AZVT Grant Recipient] (P) Buice

The Influence of Avian Herd Immunity on West Nile Virus Transmission in Chicago, Illinois (A) McKee

The Use of Finger Blood Pressure Measurement for the Monitoring of Cardiovascular Disease in Bonobos (*Pan paniscus*) at the Milwaukee County Zoo (A) Korman

Urban and Migratory Bird Conservation (A) Maurer

Use of a Novel Radiographic Technique for Pregnancy Determination and Fetal Count in Cheetahs (*Acinonyx jubatus*) and Maned Wolves (*Chryscocyon brachyurus*) (A) Ware

Voluntary Venipuncture in Great Apes (P) Debose

POSTERS

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Can We Prevent a Heck-of-a-Lot of Hippos? A Castration Procedure on a Hippopotamus (*Hippopotamus amphibious*) (A) Wheeler

Class III Laser Application in a Zoo Setting (A) Brush

Clinical Use of GV-26 Acupuncture Point for Reduction of Anesthetic Recovery Time in Reptiles (A) Bartolini

WET LABS

Advanced Digital Radiographic Techniques and Image Processing Waters

Gross Necropsy Technique for Zoo Veterinary Technicians Garner

Low Velocity, Short Range Darting in the Zoological Setting Case

ZIMS for Medical Workshop: Tips, Tricks, Pitfalls, and Pathology Teare
Banking for Babies: How and Why Bank Plasma for Neonatal Ungulates (A) Olson

California Sea Lion (*Zalophus californianus*) Anesthesia Techniques for the Veterinary Technician (P) McGrew

Chelonid Fibropapilloma-Associated Herpesvirus Infection In Symptomatic and Asymptomatic Infected Green Sea Turtles (*Chelonia mydas*) (A) Page-Karjian

Collecting and Trimming Tissues for Histopathology: How to Get the Most Information from Necropsies and Biopsies (A) Stedman

Comparative Cytology of Respiratory Samples of Atlantic Bottlenose Dolphins (*Tursiops truncatus*) in Rotan, Honduras (P) Harman

[Student Presentation]

Cryosurgical Application as an Adjunctive Therapy in Treating Reactive Hyperplastic Pododermatitis in a White Rhinoceros (*Ceratherium simum*) (P) Deiter

Diagnosis and Treatment of Cardiac Arrhythmia in a Kori Bustard (*Ardeotis kori*) (A) Balfour

Diagnosis of Blastomycosis in a Wild Caught Polar Bear (*Ursus maritimus*) (A) Huber

Diagnostic Sample Handling and Processing and Hematology of Exotic Animal Species: Tips and Tricks (A) Stacy

In-House Production of Antimicrobial-Impregnated Polymethyl Methacrylate (AIPMMA) Beads and Their Use in a Nayala (*Tragelophus angasii*) with Recurring Facial and Cervical Abscessation (P) Smoot

Lead Toxicity in Argentine Water Fowl Caused by Spent Ammunition, and its Effects on the Ecosystem of Santa Fe Province, Argentina (A) Marchese

[Lions (*Panthera leo*) as a Model System for Investigating Reversibility Following Suprelorin® Treatment (A) Agnew

Listeriosis (*Listeria monocytogenes*) in Coquerel’s Sifaka (*Propithecus coquereli*) at the Wildlife Conservation Society’s Bronx Zoo (P) DeMeo & Gilewski

[2014 Recipients, LPP Scholarship]
Making Your Pharmacy Work for You  
(A) Towson

Medical and Surgical Management of a Fungal and Bacterial Infection in the Toes of a White Crested Laughing Thrush (*Garrulax leucolophus*)  
(A) Rooker

National Marine Mammal Foundation: Our Mission to Improve Life for All Marine Mammals  
(A) Longenecker

Observations Between White Blood Cell Morphology and Disease Severity During a Ranavirus-Herpes Virus Coinfection in a Group of Captive Eastern Box Turtles (*Terrapene carolina carolina*)  
(A) Sohl

Operant Conditioning of American Alligators (*Alligator mississippiensis*) at the North Carolina Zoological Park  
(A) Scott-Shaub

Overview of Pain Management in Reptiles and Pharmacokinetics of Tramadol and O-Desmethyltramadol in Loggerhead Sea Turtles (*Caretta caretta*)  
(A) Norton

Plasma Corticosterone Levels as a Predictor of Stress, Reproductive Success, and Health Status in Free-Ranging Nesting Loggerhead Sea Turtles (*Caretta caretta*)  
(A) Flower

Sea Turtle Health Programs of the St. Kitts Sea Turtle Monitoring Network (*Program Overview*)  
Stewart

Sea Turtle Neurology  
(A) Norton

Supplements for Exotic Animals  
(A) Mejia-Fava

Techniques to Monitor Wildlife Health: Baseline Assessments, Investigating Mortalities, and Tracking Pathogens Between Ecosystems  
(A) Haman

The Art of Training Uncommon Animals for Common Diagnostic Procedures  
(A) Weidner

The Care and Management of a Western Lowland Gorilla (*Gorilla gorilla*) with a Fractured Mandible  
(A) Norris

The Georgia Sea Turtle Center, Past, Present, and Future—A Model for Conservation of Wildlife  
*Keynote Address* (*Institution Overview*)  
Norton

The Logistics of Anaesthetising an Aldabra Giant Tortoise (*Aldabrachelys gigantea*) for Phallic Amputation  
(A) Ryan

The Medical and Surgical Intervention of Intestinal Ileus and Obstruction in Juvenile Black-Footed Penguins (*Spheniscus demersus*)  
(P) Lovering

The Role of Zoos in Conservation Medicine and One Health  
(A) Palmer

The Treatment of Anaplastic T-Cell Lymphosarcoma in a South African Lion (*Panthera leo krugeri*)  
(P) Hinkle
The Turtle Survival Center: A Challenging Start  
(A) Koeth

Using Arterial Blood Gas Analysis as a Tool for Patient Management  
(A) Mobley

What the Hellbender? Veterinary Contributions During Cryptobranchus alleganiensis alleganiensis Field and In-House Research  
(P) Skeba

You Had Me at Trocar: Acute Gastric Ileus with Secondary Gas Distention in the South American Lungfish (Lepidosiren paradoxa)  
(A) Jones

POSTERS  
Note: (P) denotes full paper; (A) denotes abstract only

An Overview of the Hematologic Evaluation of Anemic Sea Turtles in Rehabilitative Care at the Georgia Sea Turtle Center  
(A) Nelson

Find Those Gonads! Sex Determination Using Laparoscopy in Bolson Tortoises (Gopherus flavomarginatus)  
(A) Smith

Long Term Activity of Loggerhead Sea Turtles (Caretta caretta) on Jekyll Island, GA, USA: A Demographical Summary based on 40 Years of Tagging on a Developed Beach  
(A) Ondich

Radiography of Nonhuman Primates in Centers for Disease Control and Prevention (CDC) Quarantine Survivability for Captive Neonatal Sichuan Takin (Budorcas taxicolor tibetana) as Assessed by Passive Transfer Status and Neonatal Clinical Pathology Profiles  
(P) Ullmer

The Itsy-Bitsy Spider and its Hemolymph: Phlebotomy and Slide Preparation for Arachnids  
(A) Mott

Transmitter Placement Methods in Wild American Alligators (Alligator mississippiensis)  
(A) Skupien

WET LABS

Sea Turtle Necropsy and Anatomy Lab  
Stedman & Norton

Venomous Snake Capture/Restraint & Anesthetic Techniques  
Andrews & Norton

Wound Vacuum-Assisted Therapy-Advanced Healing Techniques  
Law  
(and Georgia Sea Turtle Center rehabilitation staff)

ZIMS for Medical - New Software Orientation  
Moses
PRESENTATIONS

Note: (P) denotes full paper; (A) denotes abstract only

Cardiovascular Irregularities in Veterinary Patients Under Anesthesia (P) Monti

Chelonian Anesthesia and Fungal Osteomyelitis: A Case Study of a Galapagos Tortoise (Chelonoidis nigra) (P) Oresjo

Comparison of the iSTAT® Portable Chemistry Analyzer with the VetScan® for Field Use in South American Fur Seals (Arctocephalus australis) at Punta San Juan (PSJ), Peru [Recipient, AZVT Grant] (A) Pauley

Complete Blood Cell Counts in Southern Stingrays (Dasyatis americana) (A) Burns

Diagnosis and Treatment of a Spinal Abscess in an Amur Tiger Cub (Panthera tigris altaica) (A) Trotta

Effects of Transmitter Attachment on the Behavior of Captive Long-Tailed Ducks (Clangula hyemalis) and Common Eiders (Somateria mollissima) (A) Ulman

Examining Maternal Investment in Steller Sea Lions (Eumetopias jubatus) Using Fatty Acids from Milk (A) Miller

Experimental Techniques for Measuring Immune Competence in Marine Animals (A) Counihan-Edgar

Field Work on Eurasian Black Vultures (Aegypius monachus) in Mongolia’s IKH Nart Nature Reserve (A) Bickel

Invasive Blood Pressure Monitoring in Exotics (P) Cramer

Looking for Worms in All the Wrong Places (A) Kinsella

Metastatic Urogenital Carcinoma in a California Sea Lion (Zalophus californianus) (A) Halach

Monitoring Reproductive Hormones in Captive Adult Female Steller Sea Lions (Eumetopias jubatus) During a Breeding Program (A) Polasek

Obtaining Voluntary End Tidal Carbon Dioxide (EtCO₂) Levels in California Sea Lions (Zalophus californianus) (A) Ortiz & Ostek

Pacific Walrus (Odobenus rosmarus) Haulout Disturbance and Recovery (A) Polasek

Physical Rehabilitation for Animals in a Zoo Setting: Potential Applications and Benefits in Veterinary Health (A) Frazier

Salmonellosis Outbreak in a Captive Collection of Rainbow Lorikeets (Trichoglossus) (P) Mady
haematodus) at the Kansas City Zoo

[2013 Recipient, Laurie Page-Peck Scholarship]

The “Art” of Skull Preservation

The Physiologic Changes That Occur in Cold-Stunned Sea Turtles

The Prickly Patient: Wound Care in an African Crested Porcupine (Hystrix africanaustralis) with Suspected Skin Fragility Syndrome

To Loop Or Not To Loop? That is the Question: A Comparison of Two Recovery Methods for Fecal Parasite Eggs

Unique Aspects of Xenarthran Clinical Management

ZIMS R2 Medical Release: Real-Time Web-Based Electronic Veterinary Medical Record Keeping, The Next Generation

POSTERS

Note: (P) denotes full paper; (A) denotes abstract only

Analysis of Testosterone and Estrogen Levels of 1.0 Grey Seal (Halichoerus grypus) Following Administration of Leuprolide Acetate

Comparison of Asian Elephant (Elphas maximus) Foot Radiography Using Direct Digital and Analog Modalities

Comparison of Body Temperature Readings Between an Implantable Microchip and a Cloacal Probe in Lorikeets (Trichoglossus haematodus)

Tegaderm™: A Fix For Cracked or Dented Eggs

The Development of a Standard Technique for Direct Digital Radiography of Asian Elephant (Elephas maximus) Feet

WET LABS

Fun with Fishes: A Review of Fish Medical Care and Management

A Quick and Dirty Review of Nematode Identification

ROUND TABLE DISCUSSIONS

Q&A with the Contraception Center

32nd Annual Meeting -- 19-25 September, 2012
Lowry Park Zoo -- Tampa, Florida
A Quantitative Determination of Fecal Parasites to Evaluate the Effectiveness of a Regimented Treatment Program  

Care and Management of Nigerian Dwarf Goat (*Capra hircus hircus*) Does and Kids  

Cetacean Anesthesia  

Clinical Case Study: Exophthalmia, Fungal Infection, Turbellarians, and Distended Abdomen in a Lemon Butterflyfish (*Chaetodon miliaris*)  

Creative Management of a Red Kangaroo (*Macropus rufus*) Following a Tibial Fracture Repair  

Florida Panther Recovery – 30 Year Update  

Immobilization and Laceration Repair of the Front Leg of a Hippopotamus (*Hippopotamus amphibius*)  

Large Shark Restraint for Routine Medical Procedures at the National Aquarium Baltimore  

Parasitology Findings 2012  

Perianesthetic Blood Pressure Management  

Pinniped Anesthesia  

Preliminary Evaluation and Overview of Blood Nutrient Parameters and Prey Item Analysis of Free-Ranging and Rehabilitated Loggerhead Sea Turtles (*Caretta caretta*) for the Development of a Tube Feeding Formula and Multi-Vitamin Supplement for Sea Turtles in Rehabilitation  

Riverbanks Zoo’s Participation in the Beza Mahafaly Lemur Biology Project in Madagascar 2011  

The Benefits and Applications of Thermography in Zoo Animals  

The Diagnosis and Treatment of a Suspected Pituitary Adenoma in a Capybara (*Hydrochaeris hydrochaeris*)  

The Diagnosis and Treatment of a Tooth Root Abscess in a California Sea Lion (*Zalophus californianus*)  

The Riddle of White Nose Syndrome: Combating a Wildlife Epizootic in Bats with Lessons from the Dark Knight™  

The Successful Hand-Rearing of a Neonatal Polar Bear (*Ursus maritimus*) From Birth
at the Toronto Zoo

The Use of Medical Grade Honey and Clindamycin to Treat Facial Abscesses in Pronghorn (*Antilocapra americana*)  
*(A)* Lydick

The Use of Vascular Access Ports for Delivery of Chemotherapeutics in Zoo Animals  
*(A)* Schlanser

Understanding the Importance of Wildlife Nutrition  
*(A)* Tollefson

Utilizing Voluntary Blood Pressure Monitoring to Manage Hypertension in Captive African Lions (*Panthera leo krugeri*)  
*(P)* McDermid

Zoo Contraception: Updates and New Research  
*(P)* Agnew

**POSTERS**  
*Note: (P) denotes full paper; (A) denotes abstract only*

An Atlas of Arctic Avian Blood Cells: Alcids  
*(A)* Belovarac

An Atlas of Arctic Avian Blood Cells: Sea Ducks  
*(A)* Belovarac

Belly Up to the Bar, Kids! Alternative Hand-Rearing Method for Small Domestic Ruminants  
*(A)* Skiba

Pythiosis in a Captive Grizzly Bear (*Ursus arctos horribilis*)  
*(A)* Freudenthal

**WET LABS**

Avian and Reptile Hematology Review  
Jenkins-Perez, Pond, & Oliva

Cardiology and Echocardiography Techniques  
Wiley

The Manatee: Natural History, Research, and Clinical Techniques  
Gerlach

**ROUND TABLE DISCUSSIONS**

Association of Zoo Veterinary Technicians Elected Positions and Responsibilities  
Oliva

Standardization of Laboratory Techniques: The Pros and Cons  
Pond

The Technician’s Role in Medical Training  
Ortiz

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**31st Annual Meeting -- 15–20 September, 2011**  
**ABQ Biopark / Rio Grande Zoo -- Albuquerque, New Mexico**

**PRESENTATIONS**  
*Note: (P) denotes full paper; (A) denotes abstract only*
Association of Zoo Veterinary Technicians Sponsored Zoological Veterinary Training Program for West African Zoos - [2010 Recipient, AZVT Grant]

Avian Malaria: A Technician’s Review (A) Lemon

Babec’s Story: The Implantation and Care of a Cardiac Resynchronization Therapy (CRT) Device in a Male Western Lowland Gorilla (Gorilla gorilla gorilla) (A) Runnells

Biological Sampling Protocols for Research and Archive Purposes at Monterey Bay Aquarium (A) Viens

Case Management of Pyometra in a Southern Stingray (Dasyatis americana) (P) Lydick and Prom

Note: This paper was published in 2010 but was not presented

Clinical Pathology Training of Veterinary and Field Biology Team Associated with the Southern Right Whale (Eubalaena australis) Health Monitoring Program at Peninsula Valdes, Argentina [2010 Recipient, AZVT Grant]

Deadly Metamorphosis: A Look at Spindly Leg Disease in the Dying Poison Arrow Frog (Dendrobates tinctorius) [2011 Recipient, Laurie Page-Peck Scholarship]

Case Management of Pyometra in a Southern Stingray (Dasyatis americana) (P) Lydick and Prom

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Deadly Metamorphosis: A Look at Spindly Leg Disease in the Dying Poison Arrow Frog (Dendrobates tinctorius) [2011 Recipient, Laurie Page-Peck Scholarship]

Diagnosing Cryptosporidium sp. in Reptiles: Results of a Survey (P) Crossett

Echocardiogram Measurements and What They Tell Us (A) King-Gallogly

Eco-Epidemiology of West Nile Virus in Suburban Chicago (A) McKee

Facial and Oral Nerve Blocks for Dental Procedures in the Non-Human Primate (A) Cital

Going Green: Design and Construction of a Twenty-First Century Zoo Veterinary Medical Center (A) Monti

Inhalant Anesthetic Delivery and Uptake (P) Abrahamsen

Microscope by Headlamp: Meeting the Challenges of Fieldwork in the Countryside of Madagascar (A) Leahy

Monitoring I (P) Abrahamsen

Monitoring II (P) Abrahamsen

Multiple Gastric Ulcers and Perforation in a Llama (Llama glama) Secondary to Posthistis (P) Freudenthal

PZP Imunocontraception: Advantages and Disadvantages (P) Frank

Sarcocystosis in a California Sea Lion (Zalophus californianus californianus) (A) O’Brien
Serum Protein Reference Intervals from Clinically Healthy Cheetahs (Acinonyx jubatus jubatus) Determined by Agarose Gel Electrophoresis

TB or Not TB in a Malayan Tapir (Tapirus indicus), That is the Question

The Diagnosis and Treatment of Acute Diabetic Ketoacidosis in an African Hunting Dog (Lycaon pictus)

The EZ-IO®: An Intraosseous Infusion System for Delivery of Emergency Fluids and Drug Therapy in Exotic and Domestic Animals

The Role of Zoo Veterinary Technicians in Training Captive Animals for Veterinary Procedures

Treatment and Diagnosis of Gongylonema sp. in a White-Faced Saki Monkey (Pithecia pithecia)

POSTERS
Note: (P) denotes full paper; (A) denotes abstract only

Medical Management of a Fennec Fox (Vulpes zerda) with Cystinuria

Whitespotted Bamboo Shark (Chiloscyllium plagiosum) Hematology: Red Blood Cell Cytoplasmic Inclusions in a Captive Juvenile Animal

WET LABS

Cutting and Preparing Reproductive Tissues for Submission to the Contraception Center

Laboratory Stain Comparisons

ROUND TABLE DISCUSSIONS

Challenges Faced by Senior/Supervisory Technicians

How Can AZA Help Your Institution Lower Costs?

ZIMS: An Update

30th Annual Meeting -- 14–20 October, 2010
Greater Los Angeles Zoo -- Los Angeles, California

PRESENTATIONS
Note: (P) denotes full paper; (A) denotes abstract only

An Update on the Academy of Veterinary Zoological Medicine Technicians

(A) Maurer
Anaplasmosis in Captive Przewalski’s Horses (*Equus ferus przewalskii*) and Maned Wolves (*Chrysocyon brachyurus*) at the Smithsonian Conservation Institute (SCBI) of the National Zoo  

Anesthesia for Tusk Repair and Subsequent Removal in an African Elephant (*Loxodonta africana*)  

Avian Anesthesia and Analgesia  

Case Management of Pyometra in a Southern Stingray (*Dasyatis americana*)  

Collection and Identification of Respiratory Mites in Great Apes  

Conservation Efforts and Satellite Tagging of Nesting Leatherback Sea Turtles (*Dermochelys coriacea*) in Costa Rica  

Guidelines for Managing Cases Diagnosed With a Zoonotic Disease Agent  

Hand-Raising Orphaned African Painted Dogs (*Lycaon pictus pictus*) Using a Domestic Canine (*Canis lupis familiaris*) Surrogate  

Health Assessments of a North American Raccoon (*Procyon lotor*) Population in Central Park, New York City, as Part of Rabies Epizootic Control Efforts  

Influenza A Virus Strains Found to Infect Wild Felids: A Review of H5N1 and H1N1  

Introduction to Reproductive Ultrasonography for the Veterinary Technician  

Koala Anesthesia and Analgesia  

Managing an Epileptic Sea Otter Pup (*Enhydra lutris*)  

Out of the Clinic and Into the Field  

Peaks of Interest: The Concept of Protein Electrophoresis  

Reptile Anesthesia and Analgesia  

Special Nutritional Needs of Reptiles  

Special Nutritional Needs of Ruminants  

Team-Based Approach in the Treatment of Cataracts in a California Sea Lion (*Zalophus californianus*)  

The Design, Transportation, and Operation of a Mobile Endocrinology Laboratory in Kruger National Park, South Africa
<table>
<thead>
<tr>
<th>Topic</th>
<th>Authors</th>
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<tbody>
<tr>
<td>The Grand Cayman Blue Iguana (<em>Cyclura lewisi</em>) Recovery Project</td>
<td>Maurer</td>
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<tr>
<td>The Role of the Frozen Zoo® in the Preservation of Endangered Species Through Genetic Research</td>
<td>Houck</td>
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<tr>
<td>The Treatment, Rehabilitation, and Release of a Loggerhead Sea Turtle (<em>Caretta caretta</em>) With Severe Shell Disease</td>
<td>Steinert</td>
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<td>Wildlife Contraception Center – Health Surveillance Program (WCC-HSP)</td>
<td>Moresco</td>
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<td>Updates and New Projects for the AZA Wildlife Contraception Center</td>
<td>Boutelle</td>
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**POSTERS**

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<tr>
<td>Avian Anesthesia Using a Ventilator for Intermittent Positive Pressure Ventilation</td>
<td>Meadows</td>
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<tr>
<td>Hematology of Amazon Freshwater Rays: A Comparison of Newly Acquired to Long Term Captive Animals</td>
<td>Maciol</td>
</tr>
<tr>
<td>Saint Louis Zoo’s Hellbender (<em>Cryptobranchus alleganiensis</em>) Anesthesia Protocol</td>
<td>O’Brien</td>
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**WET LABS**

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<th>Topic</th>
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<tr>
<td>Dart Making and Target Practice</td>
<td>Rocca</td>
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<tr>
<td>Digital Radiography</td>
<td>Peters</td>
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**ROUND TABLE DISCUSSIONS**

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<th>Topic</th>
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<tr>
<td>Cases That Make You Go Hmmm… Share Those Fun, Challenging and Different Animal Procedures</td>
<td>Viens</td>
</tr>
<tr>
<td>Granted – What Really Happens; A Discussion of Past Experiences</td>
<td>Harvison &amp; Acosta</td>
</tr>
<tr>
<td>The Ins and Outs of an Inhalation Anesthetic Agent Monitor</td>
<td>Turnage</td>
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**29th Annual Meeting -- 1–6 October, 2009**

**Yellowstone National Park and Grand Teton National Park**

**Jackson, Wyoming**

**PRESENTATIONS**

Note: (P) denotes full paper; (A) denotes abstract only

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<tr>
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<tr>
<td>Altering Anthelmintic Techniques to Reduce <em>Haemonchus contortus</em> Populations in</td>
<td>Clabbers</td>
</tr>
</tbody>
</table>
Captive Giraffe (*Giraffa camelopardalis*)

An Introduction to Female Hormonal Contraceptives in Zoos  
*[2009 Recipient, Laurie Page-Peck Scholarship]*  
(P) Aplasca

Basic Cytology: Inflammation vs. Neoplasia  
Notes only  
Pond

Cardiac Disease in Captive Gorillas (*Gorilla gorilla gorilla*)  
(A) King-Gallogly

Diagnosis and Treatment of Endometriosis in Two Macaque Species (*Macaca nigra* and *Macaca silenus*)  
(P) Clabbers

Experimental Treatment Protocol for Acanthocephalan Peritonitis in the Southern Sea Otter (*Enhydra lutris nereis*)  
(A) Viens

Foreign Body Removal in an African Spurred Tortoise (*Geochelone sulcata*) and the Role of the Critical Care Veterinary Technician  
(P) Darbo

Hawai`ian Endangered Bird Conservation Program: The Challenges of Long Distance Veterinary Care  
(P) Williams

Managing a Critically Ill Snow Leopard (*Uncia uncia*)  
(P) Stringer

Monitoring Bone Growth of Asian Elephant Calves (*Elephas maximus*) Through Monthly Radiographs  
(P) O’Brien

Polar Bear Express: Coordinating an Off-Site Dangerous Animal Transport for a Medical Procedure  
(A) Lemon

Population Management in Captive Exotics With Porcine Zona Pellucida (PZP)  
(A) Frank

Spaying Fish to Eliminate Egg Stasis  
(A) Belovarac

Successful Milk Formulas for Hand-Rearing Neonatal Hoofstock at the Wildlife Conservation Society  
(A) Eidlin

The Black-Footed Ferret (*Mustela nigripes*) Recovery Program: An Update  
(A) Branvold

The Effects of Anticoagulant Choice and Sample Processing Time on Hematologic Values of Juvenile Whooping Cranes (*Grus americana*)  
(A) Mauer

The Wolf Recovery Program in the Northern Rocky Mountains  
(A) Jimenez

The Use of a Progesterone Enzyme Immunoassay (EIA) For Monitoring of Luteal Activity in Pregnant African Elephants (*Loxodonta africana*)  
(P) Galvanek & Sohl

Urinalysis Review  
Notes only  
Pond

**POSTERS**

Note: (P) denotes full paper; (A) denotes abstract only
An Advancement in Melengestrol Acetate (MGA) Implant Contraception Sterilization Techniques

Bringing Continuing Education Into the Workplace

The Turtle Girdle: Plastic Device for Non-Surgical Management of Fractured Humerus in an Aquatic Turtle Species

Validation of Vetlab Supply’s Avian Leukopet™

WET LABS

Making MedARKS Work for You: Basic and Advanced Workshops

1. Basic MedARKS
2. Advanced MedARKS

ROUND TABLE DISCUSSIONS

Anesthesia Monitoring and Maintenance of Normal Vitals

Contraception Topics: Answering Your Questions on Methods, Product Updates and Reversibility

PRESENTATIONS

A Review of Biomaterial Shipping Procedures Through Courier Services in the United States

A Successful Veterinary Technician Extern and Volunteer Program at the Wildlife Center of Virginia

Anesthesia and Tusk Removal in a Male Asian Elephant (Elephas maximus)

Appropriate Vitamin E Supplementation for Black Rhinoceros (Diceros bicornis)

Beyond the Blue Line: Creative Quarantine Adaptations and Procedures

Camel Medicine: Spit Happens

Chinese Alligator (Alligator sinensis), A Conservation Effort in the Far East: An AZVT Grant Supported Project Trip Report [AZVT Grant Recipient]

Chronic Anorexia With Probable Pseudobupthalmia in a Male Burmese Python
Clinical Assessment of a Cranial Tumor in a Rothchild’s Giraffe (*Giraffa camelopardalis rothschildi*)

Development of an *Aspergillus* Vaccine

Development of the Gorilla Health Project

Effects of Climate Change on North Atlantic Right Whales (*Eubalaena glacialis*) and Other Marine Mammals

Embrace Your Inner Abacus: A Review of the Everyday Math in Our Tech Lives

Hand Raiding Three African Lion Cubs (*Panthera leo krugeri*)

Ileo-Colic Intussusception in a Captive Mountain Lion (*Puma concolor*)

International Organization of Standardization (ISO) 14001 Environmental Management Systems (EMS) at the North Carolina Zoological Park

Investigating the Seroprevalence of Q Fever in White-Tailed Deer (*Odocoileus virginianus*)

Investing in Your Volunteers: A Training Program at the Monterey Bay Aquarium

It’s Not What it Looks Like: How Post-Mortem Changes Can be Mistaken for Lesions at Necropsy

Malignant Histiocytic Sarcoma in a Female Southern Sea Otter (*Enhydra lutris nereis*)

Management of Inflammatory Bowel Disease in a Siamang (*Hylobates syndactylus*)

Medical Management of a Giant Anteater (*Myrmecophaga trydactyla*) Neonate After Severe Con-Specific Trauma

Recapture of an Escaped Western Lowland Gorilla (*Gorilla gorilla gorilla*) at the Franklin Park Zoo

Ruminant Nutrition: Techniques for Evaluating Changes in Diet

Southern Stingray (*Dasyatis americana*) Diagnostics in the Field

There is No “I” in “TEAM”: Hospital Management for the Veterinary Technician

They’re Retro, Campy, Foamy and Runny: Getting to Know Your Primate Zoonoses

Treatment and Supportive Care of Amphibians

Treatment of a Louse (*Haematomyzus elephantis*) in a Captive Heard of African Elephants (*Loxodonta africana*)
Use of Digital Infared Thermography to Assess Thermal Gradients and Abnormalities of the Elephant Foot, and Thermal Responses to Changes in Environmental Conditions (A) Willard & Chromiak

Yippee-Ki-Yay: Prairie Dog Wrangling for the Solo Technician (A) Koocher

POSTERS
Note: (P) denotes full paper; (A) denotes abstract only

Hand-Rearing a Channel Island Fox Kit (Urocyon littoralis clementae) (A) Kaufman

Medical Management of the Vancouver Island Marmot (Marmota vancouverensis) in Captivity (A) Angermeyer

Red Blood Cells: The Good, the Bad, and the Ugly (A) Ackerman

Removal of Branchiuran from Orange-Bellied Piranha (Pygocentrus piraya) (A) Wone

Seek and Ye Shall Find: Novel Regional Findings of Leptospirosis in Northeast, U.S. Phocids (A) Patchett

The Little Zoo That Could: Training for Medical Management in a Small Zoo (A) DeMedeiros, Kaeterle, & Silvia

WET LABS

Fish Biology and Examination for Technicians Gibson

Scientific Writing Poyntton

Thermography of Elephants Willard & Chromiak

ROUND TABLE DISCUSSIONS

Group Dynamics in the Veterinary Hospital Purnell

Math Practice Table Leahy

Quality Control in the Lab Ackerman

Zoo Technician Evolution: So You’re a Supervisor Now Buice

27th Annual Meeting -- 7–10 September, 2007
Honolulu Zoo -- Honolulu, Hawaii

PRESENTATIONS
Note: (P) denotes full paper; (A) denotes abstract only
Blood Cell Morphology: Can We Standardize What We Report?  (A) Keener

Can a Single Sample Serum Progesterone Value Diagnose Pregnancy in White Rhinocerous (*Ceratotherium simum simum*)?  (A) Oliva

*Cephenemyia* spp. The Deer Throat Bot  (P) Oresjo

Chelicerates Health Study  (A) Castro

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Cytology as a Diagnostic Tool During Gross Necropsy Examinations  (A) Walsh

Eastern Equine Encephalitis in a Captive Harbor Seal (*Phoca vitulina*)  (P) DeMedeiros

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Growing Pains: One Hospital’s Quest to Build an Addition  (P) Eidlin

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[2006 AZVT Grant Recipient]

Hematology of the Manatee (*Trichechus manatus*)  (P) King

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Maybe I Shouldn’t Have Eaten That: Case Study of a Male African Lion (*Panthera leo*)  (P) Rooker

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[2007 LPP Scholarship Winner]

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Note: (P) denotes full paper; (A) denotes abstract only

Bronchoscopy of Bottlenose Dolphins (Tursiops truncatus)  (A) Jones

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**13th Annual Meeting -- 6–10 October, 1993  
St. Louis, Missouri**

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*Note: (P) denotes full paper; (A) denotes abstract only*

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Musk Ox on the Prairies (P) McCarthy

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Rapid Dimethyl Sulfoxide-Modified Acid-Fast Stain of Cryptosporidium Oocysts in Stool Specimen (P) Neely
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Louisville, Kentucky

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Current Application of Embryo Transfer in the Zoo World (P) Loskutoff &
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