

Saturday,	Exotic Animal Track (AEMC)	Wildlife Track (WAAM)	
March 7, 2020	Gladys Valley Hall, Room 1020	Gladys Valley Hall, Room 1041	
Audience	Veterinary Professionals  Registration & Continental Breakfast  Veterinary Professionals		
7:00 am - 8:00 am			
8:00 am - 8:10 am	Welcome & Announcements	Welcome & Announcements	
8:10 am - 9:00 am	Setting Up an Exotics Practice  Danielle Tarbert, DVM	Pet Fish Case Discussion  Jessie Sanders, DVM	
9:10 am - 10:00 am	<b>Ball Python Nidovirus</b> Danielle Tarbert, DVM	Otter Cardiology & Effects of Domoic Acid Catherine Gunther-Harrington, DVM, DACVIM (Cardiology) Megan Moriarty, DVM, MPVM	
10:00 am - 10:20 am	Morning Break		
10:20 am - 11:10 am	Small Mammal Urolithiasis Sarah Ozawa, DVM	Rhinoceros Medicine & Conservation  Lauren Howard, DVM, DACZM	
11:20 am - 12:10 pm	Amphibian Diagnostic Techniques and Common Diseases  Kurt Sladky, MS, DVM, DACZM, DECZM (Herpetology), DECZM (Zoo Health  Management)	Elephant Herpes: A Global Perspective  Lauren Howard, DVM, DACZM	
12:10 pm - 1:00 pm	Lui	nch	
1:00 pm - 1:50 pm	Gladys Valley Hall, Room 1020  PLENARY SESSION: SLOTHS AS SENTINELS FOR ENVIRONMENTAL HEALTH  Kurt Sladky, MS, DVM, DACZM, DECZM (Herpetology), DECZM (Zoo Health Management)		
2:00 pm - 2:50 pm	Examination and Treatment of the Lagomorph Eye  Bret Moore, DVM, PhD	Captive Cetacean & Pinniped Ophthalmology  Carmen Colitz, DVM, PhD, DACVO	
2:50 pm - 3:10 pm	Afternoon Break		
3:10 pm - 4:00 pm	How to Get Your Bird to Survive Surgery  Larry Nemetz, DVM	Elasmobranch Medicine Shane Boylan, DVM	
4:10 pm - 5:00 pm	Evaluating Proventricular Foreign Bodies in Birds  Larry Nemetz, DVM	Critically Endangered Turtles & Treating Turtle Trauma Shane Boylan, DVM	



Sunday, March 8, 2020	Exotic Animal Track (AEMC) Gladys Valley Hall, Room 1020	Wildlife Track (WAAM) Gladys Valley Hall, Room 1041	
Audience	Veterinary Professionals	Veterinary Professionals	
7:00 am - 8:00 am	Registration & Continental Breakfast		
8:00 am - 8:10 am	Welcome & Announcements	Welcome & Announcements	
8:10 am - 9:00 am	Fish Pain Management  Kurt Sladky, MS, DVM, DACZM, DECZM (Herpetology), DECZM (Zoo  Health Management)	Sea Turtle Stranding Rescue & Rehab  Julie Cavin, DVM	
9:10 am - 10:00 am	Reptile Pain Management  Kurt Sladky, MS, DVM, DACZM, DECZM (Herpetology), DECZM (Zoo  Health Management)	Treating Wildlife Burns with Fish Skin  Jamie Peyton, DVM, DACVECC, CVA	
10:00 am - 10:20 am	Morning Break		
10:20 am - 11:10 am	When You Thought it Could Not be Reproductive Disease in Birds  Larry Nemetz, DVM	Terrestrial Invertebrate Medicine  Jenessa Gjeltema, DVM, DACZM	
11:20 am - 12:10 pm	Radiography of the Respiratory System in Birds  Larry Nemetz, DVM	Student Research Presentations Student speakers pending*	
12:10 pm - 1:00 pm	Lui	nch	
1:00 pm - 1:50 pm	Gladys Valley Hall, Room 1020  PLENARY SESSION (WAAM): WILDLIFE HEALTH IN ACTION  Kirsten Gilardi DVM, DACZM - Karen C. Drayer Wildlife Health Center		
2:00 pm - 2:50 pm	Ferret Coronavirus  Danielle Tarbert, DVM	Diseases of Amphibians & Fish in California Esteban Soto, DVM, MSc, PhD, DACVM	
3:00 pm - 3:50 pm	Rodent Dermatology Stephen White, DVM, DACVD	Bighorn Sheep Pneumonia Complex Peregrine Wolff, DVM	



LEARNING OBJECTIVES: SATURDAY, MARCH 7, 2020		
TRACK 1: Exotic Animal Track (AEMC)	TRACK 2: Wildlife Track (WAAM)	
<ul> <li>Setting Up an Exotics Practice, Danielle Tarbert, DVM</li> <li>Following this presentation, attendees will be able to:</li> <li>Objectively evaluate which species they may be ready to incorporate into practice</li> <li>Identify resources and methods for additional training of support staff and veterinarians in the field of exotic animal medicine</li> <li>List specialized forms, equipment, and pharmaceuticals that are commonly utilized in the practice of exotic animal medicine.</li> </ul>	Pet Fish Case Discussion, Jessie Sanders, DVM  1. How to work up a pet fish case 2. Important history questions for pet fish cases 3. Common diagnostics to use in pet fish 4. How water quality can influence fish cases	
<ol> <li>Ball Python Nidovirus, Danielle Tarbert, DVM</li> <li>Following this presentation, attendees will be able to:         <ol> <li>Identify common clinical signs associated with nidovirus (serpentovirus) infection in snakes</li> <li>Compare the feasibility and utility of multiple serpentovirus diagnostic test options</li> <li>Understand potential clinical outcomes of serpentovirus infection and the associated implications for large collections</li> </ol> </li> </ol>	<ol> <li>Otter Cardiology &amp; Effects of Domoic Acid, Catherine Gunther-Harrington, DVM, DACVIM (Cardiology)</li> <li>Identify risk factors for cardiomyopathy in southern sea otters.</li> <li>Summarize current research methods addressing domoic acid exposure and heart disease in sea otters.</li> <li>Describe the challenges of obtaining echocardiograms in sea otters and how to overcome them.</li> <li>List basic echocardiographic windows and measurements for structural and functional assessment in southern sea otters.</li> </ol>	
<ol> <li>Small Mammal Urolithiasis, Sarah Ozawa, DVM</li> <li>Identify anatomical differences in the urogenital tract of small mammal species.</li> <li>Describe the most common type of stones in various small mammal species.</li> <li>Come up with a diagnostic plan for urolithiasis.</li> <li>Describe treatment options for urolithiasis and preventative strategies.</li> </ol>	<ol> <li>Rhinoceros Medicine &amp; Conservation, Lauren Howard, DVM, DACZM         Symposium attendees will:         <ol> <li>Understand the conservation status of rhinoceros species globally, and threats facing them.</li> <li>List up to three health concerns of rhinoceros under human care.</li> <li>Describe the planning and execution of successful standing sedation and general anesthesia in rhinoceros.</li> </ol> </li> <li>Understand the objectives of the Northern White Rhino Initiative at SDZG.</li> </ol>	



Amphibian Diagnostic Techniques and Common Diseases, Kurt Sladky, MS, DVM, DACZM, DECZM (Zoo Health Management & Herpetology)  1. Understand clinical anesthetic and analgesic techniques in amphibian species  2. Introduce common diagnostic techniques for use in amphibians  3. Discuss common diseases associated with captive and free-ranging amphibian species.  PLENARY SESSION: SLOTHS AS SENTINELS FOR ENVIRONMENTAL HEALTH, Kurt Sladky, MS, DVM, DACZM, DECZM (Zoo Health Management & Herpetology)	<ol> <li>Elephant Herpes: A Global Perspective, Lauren Howard, DVM, DACZM</li> <li>Symposium attendees will:         <ol> <li>Be able to describe the difference between EEHV and EEHV Hemorrhagic Disease.</li> <li>List the recommended steps in monitoring and treatment of EEHV Hemorrhagic disease.</li> <li>Understand the status of EEHV in Asian elephant range countries.</li> <li>Identify resources to learn more about EEHV.</li> <li>Describe the differences in knowledge of EEHV in African and Asian elephants.</li> </ol> </li> </ol>
1. Discuss the natural history of sloth species in Costa Rica, and potential exposure to pest	ticides and herbicides.
2. Introduce use of anesthetics and diagnostic procedures in sloths.	
3. Discuss exposure of sloths to pesticides and herbicides and how this might relate to ecc	osystem, animal, and human health
<b>Examination and Treatment of the Lagomorph Eye,</b> <i>Bret Moore, DVM, PhD</i> The purpose of this talk is to:	Captive Cetacean & Pinniped Ophthalmology, Carmen Colitz, DVM, PhD, DACVO
<ol> <li>To provide an overview of key ophthalmic conditions in rabbits.</li> <li>To discuss different clinical presentations and therapeutic options for select</li> </ol>	Review of anatomy differences between marine species and terrestrial species
ophthalmic conditions.	2. Characterization of common diseases affecting cetacean and pinniped
3. To introduce medical and surgery options upon referral to an ophthalmologist,	species
including several novel therapies.	3. Discussion of therapeutic options for these diseases
How to Get Your Bird to Survive Surgery, Larry Nemetz, DVM	Elasmobranch Medicine, Shane Boylan, DVM
To understand all the factors that influence the surgical survival of the avian patient from	
pre surgical staging, the surgical procedure itself, and post surgical concerns.	1. Water quality
	2. Infectious disease
	Diagnostics including imaging and bloodwork     Chemother nouties: treating parasites and infections
	<ul><li>4. Chemotherapeutics: treating parasites and infections</li><li>5. Common diseases in captivity of sandtigers: scoliosis, drop jaw, green</li></ul>
	teeth, prolapses, and goiter



Evaluation of Ventricular	Foreign	Bodies in B	irds. Larri	v Nemetz	DVM
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- 1. How to radiographically see a ventricular foreign body
- 2. How to determine if a ventricular foreign body is pathogenic or not
- 3. Options to resolve ventricular foreign bodies that are determined to be pathogenic

## **Critically Endangered Turtles & Treating Turtle Trauma,** *Shane Boylan, DVM* Learning objectives with non marine turtles:

- 1. Husbandry and environmental "medicine"
- 2. Infectious disease including TINC, amoeba, mycoplasma, herpes, ranavirus etc.
- 3. Diagnostics including imaging and bloodwork
- 4. Emergency medicine and surgery including shell repair, aural abscess debridement, and esophagostomy tubes



LEARNING OBJECTIVES: SUNDAY, MARCH 8, 2020	
TRACK 1: Exotic Animal Track (AEMC)	TRACK 2: Wildlife Track (WAAM)
Fish Pain Management, Kurt Sladky, MS, DVM, DACZM, DECZM (Zoo Health Management & Herpetology)  1. Understand the scientific and sociopolitical controversies surrounding fish being able to experience pain.  2. Discuss structural and functional mechanisms associated with nociception/pain in fish.  3. Discuss clinically-relevant analgesics for use in fish.	Sea Turtle Stranding Rescue & Rehab, Julie Cavin, DVM  This lecture will give attendants insight into:  1. the normal anatomy and physiology of sea turtles, 2. some of the various causes of stranding and 3. the unique challenges that go into caring for rehabilitating these animals.
Reptile Pain Management, Kurt Sladky, MS, DVM, DACZM, DECZM (Zoo Health Management & Herpetology)  1. Understand the concept of pain and nociception in reptiles.  2. Discuss structural and functional mechanisms associated with pain in reptile species.  3. Discuss clinical options for analgesic use in reptile species.	Treating Wildlife Burns with Fish Skin, Jamie Peyton, DVM, DACVECC, CVA
<ol> <li>When You Thought it Could Not be Reproductive Disease in Birds, Larry Nemetz, DVM</li> <li>Understand the reproductive system of birds is complex.</li> <li>Understand the reproductive system of birds influences many other organ systems.</li> <li>Systemic approach in the diagnosis of reproductive pathology in the bird</li> </ol>	<ol> <li>Terrestrial Invertebrate Medicine, Jenessa Gjeltema, DVM, DACZM</li> <li>Become familiar with basic anatomic and physiologic features of tarantulas and other terrestrial invertebrates</li> <li>Learn basic clinical techniques for application in tarantulas and other terrestrial invertebrates</li> <li>Become familiar with common diseases and medical conditions of tarantulas and other terrestrial invertebrates</li> </ol>
Radiography of the Respiratory System in Birds, Larry Nemetz, DVM  1. The radiographic anatomy of the avian respiratory system  2. How to achieve the best radiographs to evaluate the avian respiratory system.  3. How radiographic pathology of the avian respiratory system appears on images.	Student Research Presentations, Student speakers pending*



## PLENARY SESSION (WAAM): WILDLIFE HEALTH IN ACTION, Kirsten Gilardi DVM, DACZM - Karen C. Drayer Wildlife Health Center

- 1. Health threats facing wildlife in California, in the US, and globally.
- 2. The importance of addressing disease in threatened and endangered wildlife populations
- 3. The role of veterinarians in helping to understand and mitigate wildlife health threats.
- 4. Examples from programs and projects of the Karen C. Drayer Wildlife Health Center at the UC Davis School of Veterinary Medicine.

<ol> <li>Ferret Coronavirus, Danielle Tarbert, DVM</li> <li>Following this presentation, attendees will be able to:</li> <li>Identify common clinical signs associated with ferret enteric coronavirus (FRECV) and ferret systemic coronavirus (FRSCV)</li> <li>Understand the diagnostic testing required for definitive diagnosis of FRSCV, as well as evaluate the diagnostic utility of other available testing</li> <li>Give treatment options and prognoses for FRECV and FRSCV</li> </ol>	<ol> <li>Diseases of Amphibians &amp; Fish in California, Esteban Soto, DVM, MSc, PhD, DACVM</li> <li>Recognize clinical signs associated with infectious diseases in fish and amphibians</li> <li>Identify the main pathogens causing diseases in captive fish and amphibians</li> <li>Compare and contrast main diagnostic methods for infectious diseases of fish and amphibians.</li> </ol>
Rodent Dermatology, Stephen White, DVM, DACVD  To become familiar with the various presentations of diseases, diagnostic tests, and treatments for the most common skin diseases found in rodents.	<ol> <li>Bighorn Sheep Pneumonia Complex, Peregrine Wolff, DVM</li> <li>Review the pathophysiology and clinical signs of respiratory disease caused by M. ovipneumoniae in domestic sheep and goats and wild sheep and the population impacts following a pathogen spillover into wild sheep.</li> <li>How genomic sequencing of M. ovipneumoniae has been used to identify the source of spillover events and the identification of chronic carriers.</li> <li>The management challenges in preventing and managing spillover events in wild sheep</li> </ol>