# **2018 Course Descriptions**

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# **Wound Management in Wildlife**

Kate Archibald

This presentation covers the basic stages of wound healing and the factors that affect healing in order to better guide wound management strategies. It also reviews current recommendations of wound dressing materials and discuss alternative therapies such as laser treatment.

(Beginner Track, General, Vet Tech CE, Vet CE)

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#### Wildlife Rehabilitation - Permits & Laws

(Daron Barnes)

Daron will present an overview of the reasons the NC Wildlife Commission is rewriting the rules, and will address the goals of the rewrite. He will cover where they are in the rewriting process and what comes next. Also covered is a discussion of the fiscal notes, how are they used, and how the regulation process works. Daron will also address some related topics: Human Wildlife Interaction (HWI) and the role of rehabilitation in HWI.

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## Humane Trapping and Handling of Wildlife

Tad Bassett

We will discuss the various methods of non-lethal trapping. (Traps and equipment will be available.) Other methods discussed will be exclusion and habitat modification.

Some lethal methods may be discussed so comparisons can be made.

(Beginner Track, General)

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#### **North Carolina Snakes**

Jeffrey Beane

North Carolina is home to some 38 snake species. Among injured wildlife presented for rehabilitation, snakes appear somewhat infrequently. In those relatively few cases where rehabilitation might prove a viable option, a working knowledge of their biology, natural history, basic needs, food preferences, and even correct species identification can be crucial to success. This presentation will include a very brief introduction to general snake biology, taxonomy, and diversity, but will focus primarily on identification and natural history of native North Carolina species.

(Beginner Track, General, Vet Tech CE, Vet CE)

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## **Raptor Trapping & Relocation**

James Capps

Aviation mishaps involving bird strikes are costly and potentially deadly public safety issue. Across the US, roughly 30% of documented damaging bird

strikes involve raptors-due to their comparatively large body size. Reducing the impact and number of raptor/aircraft strikes is a priority for both the Department of Defense and Civil Aviation sectors. Non-lethal management of raptors can be accomplished through trapping and relocating potentially problematic birds. This discussion will focus on raptor trapping techniques, best management practices and safe handling-along with background on the raptor strike issues in North Carolina. (Beginner Track, General, Vet Tech CE)

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#### **Training & Operant Conditioning Lecture and lab**

Alison Castillo

The use of positive reinforcement and training is critical to helping wildlife ambassadors adjust to a life in captivity. This session will cover the basics of operant conditioning, as well as addressing some common animal behavior challenges. Would you like resident/education birds and mammals to willingingly participate in their own care and outreach? Would you like to build a positive relationship with resident animals based on trust? Would you like to enrich animal's lives through activities that engage natural behaviors and improve psychological well-being? Operant Conditioning is a form of training that shapes naturally occurring behaviors allowing animals to be partners in all aspects of captive management and educational outreach. Please join me during lecture to learn the principles of positive reinforcement training, and later, a lab where we will practice operant conditioning techniques, and have a lot of fun.

(Beginner Track, General, Vet Tech CE)

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## **Groundhog Rehabilitation**

Melissa Coe

Groundhog rehabilitation with a twist! Learn more about groundhogs and rehabilitation techniques as we present our popular children's program to include rehabilitation information with a lighter side.

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#### **NCSU Urban Bear Project**

Christopher S. DePerno, Ph.D. & Nicholas Gould

We are collecting information on the ecology of black bears in urban/suburban areas. Specifically, we will collect data on survival rates, causes of mortalities, movements and activity patterns of bears in urban/suburban areas, determine features of travel corridors, and determine location and characteristics of den sites. We use a variety of techniques and equipment in the field to accomplish and help achieve these objectives. Ultimately, the results from this project will be used to assist the North Carolina Wildlife Resources Commission in developing science-based management strategies for bear populations in North Carolina. This project aims to address and build upon modern applications for managing large carnivores in urban areas, and thus will be valuable in the larger scientific community.

(Beginner Track, General, Vet Tech CE)

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## **Handling and Restraint**

Dr. Ernesto Dominguez

Learn tried and true capture, restraint, and handling techniques used to effectively work with wildlife. This class will include photos and videos of appropriate methods used to capture and restrain commonly encountered species in wildlife rehabilitation. Discussion will include the importance of learning and developing skills to ensure the wellbeing of both you and the animal. We'll also cover indispensable transporting tips to keep you protected and the animal as secure and stress-free as possible.

(Beginner Track, General, Vet Tech CE, Vet CE

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#### White-tail deer rehabilitation

Dr. Ernesto Dominguez

Ahhhh!!!! Cute Bambi!!!!!. Fawns can cause the desire to be cuddle, protected, nurture, and loved. Most fawns need no human intervention; they are kidnapped, and represent a big challenge in wildlife rehabilitation. White-tail deer rehabilitation is not just challenging, but may also be dangerous. This presentation covers handling and restraint techniques of deer fawns, natural history, rehabilitation challenges, common disease and quarantine procedures, housing and nutritional requirements, and important tips and tricks.

(Beginner Track, General, Vet Tech CE, Vet CE)

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#### **Amphibian Medicine & Rehabilitation**

Daniel S. Dombrowski, M.S., D.V.M

The North Carolina Museum of Natural Sciences maintains a collection of thousands of animals for live exhibits and educational programming. The Museum's diverse living collection includes hundreds of amphibians, both native North Carolina species and other exotic species from around the world. Through a review of clinical cases from the Museum, this presentation will provide participants with an introduction to amphibian medicine with an emphasis on captive care and health management related to rehabilitation. In general, clinical and husbandry techniques utilized to facilitate health evaluations and medical management of sick or injured amphibians should be developed with due consideration to stress reduction and limited handling. Although, most adult amphibians have lungs, many forms have gills and face similar aquatic environmental challenges as fish. It is important to understand that handling techniques and captive husbandry are in many cases going to be as important as medical management in amphibian rehabilitation. This presentation will provide participants with an introduction to useful tricks and standard techniques in health evaluations and an introduction to standard quarantine procedures for amphibians. Participants will also be led in discussion of the current state of emerging infectious diseases impacting wild amphibian populations.

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# **Bird Tips and Tricks**

Maureen Eiger

Ever get that bird that just does not want to eat? How do you get birds to eat on their own? From hand

feeding nestlings, fledglings and adults, to housing then releasing birds, learn new ways to save time, money and frustration when rehabbing wild birds. Share your own best practices and tips at the round table discussion that will be held after the presentation.

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## **Fascinating Feathers**

Maureen Eiger

All birds have feathers, but why do they come in different colors, shapes and sizes? Are blue feathers really blue? We will learn how feathers get their color, why some feathers are not waterproof and what makes feathers stronger. The class will cover some unusual uses for feathers by birds. We will learn which birds use their feathers for music, tools, poison and which bird can be its own little copper mine. (Beginner Track, General, Vet Tech CE)

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#### Wildlife & Avian/Reptiles Radiology

(Beginner Track, General, Vet Tech CE)

Dr. Maria Evola

This session will focus on diagnostic imaging of wildlife including small mammals, avian, and reptile imaging. The focus will be on traditional radiographs including tips and tricks for obtaining the most helpful diagnostic images, however using contrast medium, as well as advanced imaging techniques including computed tomography (CT) and ultrasound will also be discussed.

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## **Bobcat Rehabilitation**

Nina Fischesser

This session will cover basic procedures of rehabilitating bobcats (Lynx Rufus), and includes screening calls, bobcat restraint, initial and continuing care, enclosures, and diet.

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## **Mammal Physical Exam Lab**

Rebekah Harp

This lab teaches the basics of a physical exam for small mammals. Students are provided a dead specimen for hands-on practice. The lab is part of the beginner track and is approved for Vet Tech CE. (Beginner Track, General, Vet Tech CE)

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#### **Fluid Therapy Lecture**

Nicole Himebaugh

Fluid therapy is one of the most basic initial supportive treatments which can make the difference between life and death for wildlife patients. Program participants learn to responsibly and effectively evaluate: administration of fluids, types of fluids, routes and volume of fluid administration and

monitoring the effects of fluid therapy.
(Beginner Track, General, Vet Tech CE)
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Sub-Q Fluids Lab Nicole Himebaugh Subcutaneous injections are the most common route for rehabilitators to give many medications and fluid therapy to the animals in their care. Here's your chance to learn the techniques, common locations, and gain some practice for subcutaneous injections of wild birds and mammals. The lab is part of the beginner track, is appropriate for intermediate rehabilitators who want to learn the technique and is approved for Vet Tech CE.  (Beginner Track, General, Vet Tech CE)
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Introduction to the Rehabilitation of Virginia Opossums  Melisse Hopping  This presentation covers species background, lifecycle, physiology, assessment and the care of orphaned opossums from intake to release, including feeding and housing.  (Beginner Track, General, Vet Teck CE)  ***********************************
Zoonosis/Sanitation/keeping it clean Melisse Hopping
This presentation covers the causes, modes of transmission, description of common zoonoses, symptoms of infection, and most of all, prevention.  (Beginner Track, General, Vet Tech CE)
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Turtle Team Tours  Rina Jaffe  The goal of the Turtle Rescue Team lab tours is to discuss the basic husbandry needs of wild amphibians

The goal of the Turtle Rescue Team lab tours is to discuss the basic husbandry needs of wild amphibians and reptiles. We will demonstrate how to efficiently house these animals while they are temporarily in captivity, receiving rehabilitation.

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# **Handling Wildlife Calls**

Carla Johnson

'My dog has brought me a baby bird.' 'I don't think the mother rabbit is feeding the young in the nest in my back yard.' 'There's a bat in my chimney.' Carla covers many of the calls frequently received by rehabilitators and vet offices.

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# Homeopathy & Flower Essence in Wildlife

Dr. Patricia Jordan

Homeopathy is the second most utilized form of medicine in the world behind indigenous herbal medicine which is the number one form of medicine in the world. Herbal medicine is over 5,000 years old but Homeopathy as a form of medicine is only 200 year old. However, Homeopathy is the least expensive and most sustainable form of medicine we have. There is a concern about the sustainability of herbal medicine especially via wild crafting and that is where the use of homeopathy proves indispensable to the planet. Homeopathy is being employed successfully in people and in animals, companion animals, farm animals, zoo animals and even wildlife. Agro homeopathy is even being used to treat produce, crops, and plants. The very best way to be introduced to the value of homeopathy and in the simplistic method of its use is in first aid and emergency implementation. Homeopathy can be there for the first responders who may in many instances be the only responders. Taking the work of several homeopaths that are also Medical Doctors, you will be introduced to the use of these medicines and how to administer in the wildlife rehab setting. A special mention to the use of Flower Essences particularly important to emergency, first aid and stressful patient needs will also be covered. References and links to important materials and sources for obtaining the remedy kits will be provided. (Beginner Track, General, Vet Tech CE, Vet CE)

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### **Turtle Shell Repair Lab**

Dr. Gregory Lewbart

This lab covers different shell repair techniques using shell models.

(Vet CE, Vet Tech CE, Turtle Rehabilitators)

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#### **Turtle Medicine and Surgery**

Dr. Gregory Lewbart

This lecture will cover the highlights and most important points related wild turtle medicine and surgery. Specific topics to be reviewed include natural history, husbandry, anesthesia, analgesia, trauma, infectious diseases, non-infectious diseases, and surgery.

(Vet CE, Vet Tech CE, Turtle Rehabilitators)

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# **Mammal Necropsy lab**

Dr. Amber McNamara

A necropsy examination can be a valuable and informative tool for the wildlife rehabilitator, illustrating normal and abnormal anatomy, the extent of an injury or disease process, and in some cases the cause of death. This lab will cover the basic components of how to complete a necropsy examination in

Making a Beak Lab

Betty O'Leary

This lab covers beak anatomy and injuries, and coping. Students will be provided with bird cadavers to practice coping after a power point presentation.  (Beginner Track, General, Vet Tech CE, Vet CE)
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Introduction to Rehabilitation  Heather Pernell  This session is the first session of the beginner track. It covers what it means to be a wildlife rehabilitator, the rules and regulations covering rehabilitation, and the general principles for raising baby mammals.  (Beginner Track)
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Introduction to the Rehabilitation of Eastern Gray Squirrels  Heather Pernell  There's always a need for more squirrel rehabbers! Come and learn how to raise and release these amusing, bushy-tailed creatures.  (Beginner Track, General)
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Advanced Zoonosis  Dr. Olivia Petritz  Wildlife reservoirs exist for several important zoonotic diseases, including plague, rabies, and tularemia Veterinarians who treat wildlife also have a responsibility to educate their staff about the risks posed by working with these species. The purpose of this presentation is to review several zoonotic diseases in wildlife endemic to North Carolina, including rabies and salmonellosis, as well as some lesser-known zoonotic diseases such as Baylisascaris procyonis in raccoons.  (Vet CE, Vet Tech CE, General)
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Pelicans  Mary Ellen Rogers  A discussion with lots of visuals about the Eastern Brown Pelican will cover babies banded and/or stranded by hurricanes at east coast rookeries. Reluctance to migrate due to habituation causes

A discussion with lots of visuals about the Eastern Brown Pelican will cover babies banded and/or stranded by hurricanes at east coast rookeries. Reluctance to migrate due to habituation causes frostbite and release problems for fledged juveniles. Recreational fishing and commercial net fishing injuries treatment will be discussed as well as release considerations. (General, Vet Tech CE)

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# Migrating Waterbirds and Wading Birds

Mary Ellen Rogers

Migrating species such as loons and gannets are discussed as well as wading birds like herons, egrets, woodstorks, rails, and bitterns. All are normally resilient and resourceful birds with few problems. They have parasites and diseases, of course, but the main issues we have to face are related to injuries inflicted by alligators and snapping turtles. How to treat these fragile species and release them are challenges to the rehabber.

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#### **Metabolic Bone Disease in Wild Mammals**

Dr. Korinn Saker

This presentation will cover:

- 1. Definition of Metabolic Bone Disease (MBD) -causes and incidence rates
- 2. Discussion of why MBD is on our radar
- 3. Prevention and treatment modalities
  - summarizing the tried and true approaches
  - updates on new approaches

(Vet CE, Vet Tech CE, General)

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# Avian Necropsy Lab

David Scott, DVM

This lab includes head-to-toe approach to avian necropsy. It is appropriate for veterinarians and advanced avian rehabilitators.

(Vet CE, Vet Tech CE, Avian Rehabilitators)

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## **Raptor Pesticide Study**

David Scott, DVM

Neurologic disease is very common in birds of prey and diagnosis is complicated by the large number of causative agents. Exposure to environmental pesticides is often undiagnosed but represents a significant risk to wild raptors and should always be considered in these cases. This report describes the results of an ongoing study involving red-shouldered hawks with fatal insecticide toxicosis.

(Vet CE, Vet Tech CE, Avian Rehabilitators)

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# **Emergency Reptile Care**

Dr. Greg Scott

This presentation will highlight common emergency presentations of native reptiles. It will cover recommendations for initial assessment, stabilization, and treatment approaches for these conditions. (Reptile Rehabilitators, Vet Tech CE, Vet CE)

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#### **Rehabilitation of Eastern Cottontails**

Jackie Wylie

This is a beginner presentation on the basics of cottontail rehabilitation. We will discuss housing, feeding and ways of reducing stress during the rehabilitation process. (*General, Vet Tech CE*)