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Message from the Director

At the CHeRI labs, spring is a time for completing research projects ahead of fawning and the hemorrhagic disease season. This spring we are wrapping up a year-long, state-wide surveillance project of midges and mosquitos to identify which species carry orbiviruses, the family of viruses that cause hemorrhagic disease in deer and other animals. CHeRI has identified seven of these viruses in deer in Florida, and now our focus is to understand which insects carry these viruses and how to control the insects. This project has incorporated the skills of UF entomologists, medical geographers, virologists and veterinarians. We are so lucky to have this kind of expertise on hand at UF.

Come say hi to us at our booth at the Southeast Trophy Association Spring Fling in Orlando on April 21-22 and learn more about what we are doing this year!

Thank you, always, for your support - Sam Dr. Samantha Wisely Director, CHeRI

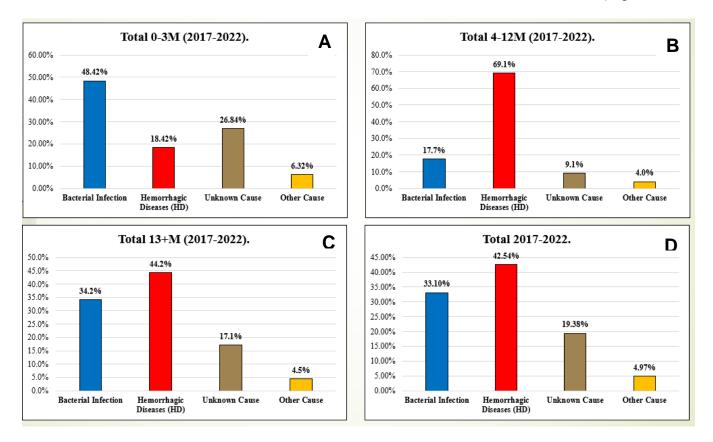


CHeRI at NADeFA

UF|IFAS CHeRI sponsored the Farmed Cervid Herd Health Symposium at the 2023 NADeFA conference.

Dr. Juan Campos attended the 2023 NADeFA conference in Indiana. He talked about viral infections we've seen in Florida farmed deer between 2016-2022. Juan was asked many general questions about EHDV. Much of the conference focused on CWD as it is a hot topic in other areas of the country.

While we focus on viral pathogens, we are also interested in mitigating mortality due to bacterial infections. Dr. Campos's investigations have found that in the youngest age class (0-3 months of age, Figure A), bacterial infections cause the majority of deaths; however, between 4 and 12 months of age (Figure B) there is a dramatic shift in causes of mortality. Viruses that cause hemorrhagic disease become the number one cause of death, and remain so as animals become older (Figures C and D).



Upcoming events

April 21st-22nd, 2023: We look forward to participating again at the 2023 Southeast Trophy Deer Association Spring Fling this April and seeing the deer farmers that we work with! If you work with us regularly, come say hi and lets catch up. If you are new to deer farming or haven't heard of CHeRI before, come by and introduce yourself! We will have informational handouts and goodies for you.



Survey on Pest Control Needs

Vilma Montenegro Castro, a PhD student of PI Nathan Burkett-Cadena at the Florida Medical Entomology Lab will conduct a survey with Florida deer farmers to learn about their current pest control needs. Vilma will be studying *Culicoides* resistance to permethrin. Your survey participation will help her design the best possible experiment and ultimately help CHeRI develop much needed integrated pest management for *Culicoides*, the vector of hemorrhagic disease viruses. Please visit her at the CHeRI booth at the 2023 SeTDA Spring Fling. For more information, please click <u>here</u>.

CHeRI Spotlights!



Vilma Montenegro Castro, PhD student in Nathan Burkett- Cadena's lab at FMEL

I am a PhD student at the Florida Medical Entomology Laboratory. I received a B.S. in agriculture from the Pan-American Agricultural University, Zamorano, in Honduras; and a M.S. in entomology from the University of Nebraska-Lincoln. I am interested in combining my agricultural and entomological knowledge to generate research that contributes to safe and sustainable agriculture. I am also passionate about public education. I have led and organized several outreach and extension events to the benefit of farmers, K-12 students, and the general public. I would like to continue connecting with the public and conducting entomological research to control and prevent vectors of medical and veterinary importance. In my free time, I enjoy painting-by-number while listening to books.

My research focuses on developing management strategies for the control of hemorrhagic disease vectors in Florida deer farms. In 2023, I will be conducting a deer farmers' survey to collect information about current pest control needs. I will also be conducting field experiments to better understand the biology and behavior of no-see-ums, and to test potential strategies for their control. I am looking forward to working with farmers, colleagues, and other scientists to produce meaningful research to improve the health of cervids while caring for the

environment.

Drs. Wisely and Campos teach technical skills

In March, Dr. Samantha Wisely and Dr. Juan Campos led a wildlife technical skills workshop for the Wildlife Disease Association student chapter at the University of Florida. Dr. Wisely demonstrated how to use different traps common in wildlife research and gave students the opportunity to set them up themselves. After, Dr. Campos explained how he uses blowdarts to immobilize animals. The students were able to shoot blowdarts from across the room at a dartboard and compete for the bullseye!



Blow dart demonstration led by Dr. Campos.



UF Wildlife Disease Association student chapter members alongside Dr. Wisely and Dr. Campos.

CHeRI HD Cases Dashboard Map

So far 2023 has been quiet and thus we don't have any updates at this time.

Check our interactive Hemorrhagic Disease Case Map periodically to stay up-to-date on EHDV and BTV around Florida in 2023. You can also go back through the years for when to anticipate HD in your region and develop your vaccination plan. This tool is particularly useful for planning vaccinations for animals that will be shipped within Florida.

Please check out our interactive Hemorrhagic Disease Case Map here or click the picture below.



Ship us your specimens!

Did you know that you can ship us specimens from your animals for disease testing? We accept biological samples from live and dead animals, but its critically important that the samples are collected, stored and shipped correctly. Improperly prepared samples yield poor or no results. Call us prior to collecting specimens to determine which sample(s) to collect and how to store it. We will work with your veterinarian or your farm manager to ensure that the right sample is collected. To help facilitate the process we have updated our shipping address and requirements for sample shipment. These changes will ensure that your sample stays cold and that no cost is incurred by the shipper.

Call **352-562-3337** if you have any questions and please download this <u>pdf</u> and keep it for reference when sending CHeRI a specimen.

Contact Us:

Email: <u>ufifas.cheri@gmail.com</u> EHD Hotline Phone: 352-562-DEER Website: <u>https://wec.ifas.ufl.edu/cheri/</u> Facebook: <u>https://www.facebook.com/UFIFAS.CHeRI/</u> Twitter: <u>@UF_IFAS_CHeRI</u>

