



APRIL 2021

NEWSLETTER

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Carlton M Herman Founders Fund is Fully Endowed

Sarah Sirica, with Ed Addison and Tom Yuill

In the last of our three-part series on the success of recent endowments for WDA Awards, it's time to celebrate the Carlton M Herman Founder's Fund. This fund was established in 1992 by Carlton himself, in order to maintain a discourse of wildlife health issues at the population level. His specific wishes are clearly stated in the fund's description on the WDA [website](#). Much of wildlife health and disease research presented at the annual conference had been focused on individual species, or on discerning answers to specific disease questions, but his intention was to maintain an interest or focus on wildlife population health and density and changes in habitat. In addition to financing speakers at the annual conference, the fund's mandate includes the potential to support funding of research, presentation of medals in acknowledgement of contributions, supporting publications, or other activities as determined by the trustees of the Fund – in other words – to support activities related to the effects of disease on wildlife populations.

When it was first created, Carlton gifted a large amount of money to set aside for this fund, and it has been added to throughout the years, which was necessary, as the cost of bringing speakers to the annual conference was often greater than the financial capacity of the fund. Money was added via conference auction profits, from general revenue, and from private donations. Now that the fund is fully endowed, the financial stress will be resolved, and the concentration can stay on finding the best ways to fulfill the fund's goals.

In order to learn more about the history and intention of the Carlton M Herman Founder's Fund, I spoke with both Tom



Photo credit: Ed Addison

Yuill, the chairman of the fund's trustees, and Ed Addison, both of whom knew Carlton. Tom explained that the fund differed from other WDA awards in that it is primarily an invited talk at the annual conference, rather than an achievement-type honor. It is called the "Founders Fund" because Carlton was one of the original founders of WDA. It was created because as he was retiring from the US Fish and Wildlife Service, he wanted to establish an endowment to promote the theme of diseases in populations.

When speaking with Ed, he expanded on the expectations of such a fund. While Carlton gave wide latitude to the trustees in how to allocate money from the fund, his major emphasis was to bring lectures on topics of more general scale than the majority of presentations made at the annual conferences. "More specifically he wished to see addressed, the impacts of disease at the population level as compared to individual animal level and how disease impacted populations in relation to other more general factors such as habitat (pollution, changes, etc.). In short, he wished us to be exposed to broad ecological ecosystem level considerations when evaluating implications of

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disease. When inviting people to present Carlton Herman Fund lectures, the trustees have been very faithful to the subject matter of highest priority to Carlton. Studies at the population ecosystem level are uncommon, often difficult to conduct and hence difficult to find.”



Photo credit: Ed Addison, from JWD Volume 33

In order to fully celebrate the success of the endowment, a small celebration of Carlton’s life and contributions to WDA seems necessary.

Carlton M Herman was born in New York in 1909 and became interested in bird watching and ornithology during high school, after becoming infirmed with a bone infection. He was inspired at that time by Frank Chapman, and other members of the American Museum of Natural History. He graduated with a Bachelor of Science from the University of Michigan in 1932, and in 1935 with a MS in zoology from Syracuse University, where he studied the blood parasites of birds in that region. He went on to attend the Johns Hopkins School of Hygiene and Public Health, where he received his ScD (Doctor of Science) in parasitology in 1938 with a thesis on the epidemiology of malaria in red-winged blackbirds. While at Johns Hopkins, he had a wide exposure to the public health approaches to disease, particularly epidemiology. This likely stoked his interest in epizootiology, known more widely today as veterinary epidemiology, and a central theme of the Founder’s Fund.

After graduation, he became a research associate on the hospital staff of the New York Zoological Society at the Bronx Park Zoo, and during that time he travelled to Kenya as part of an animal importation effort. In Kenya, he spent a month at the Veterinary Research Center near Nairobi, investigating blood parasites of birds. In 1940 he moved across the US to become a research associate at the San Diego Zoo hospital, and while there, he was the co- founder of the Southern California Parasitologists. Carlton later accepted a position as a parasitologist with the California Division of Fish and Game, in charge of disease investigations, with a primary focus on deer and quail. He was concurrently working with the US Fish and Wildlife Service (USFWS) as director to an extension project on reviewing wildlife disease literature, particularly on rabbits.

In 1950, Carlton moved back to the east coast and joined staff at the Patuxent Wildlife Research Center of USFWS to officiate their disease program, where he worked until retirement as the Chief of Wildlife Diseases and Parasite Studies in 1971. While in this position, he not only continued research and supervised others on investigations of wildlife disease problems, but developed contacts both within the US and abroad, developing relationships with wildlife biologists, veterinarians, and public health personnel around the world. These interactions likely were forefront in his mind while he was founding the Wildlife Disease Association with other members of both the Wildlife Society and the Wildlife Management Institute, with annual meetings at the North American Wildlife Conference.

As WDA was getting established, Carlton served as both a chairman and editor. In 1959, an interesting “experiment” was proposed by the American Institute of Biological Sciences (AIBS), that a biological organization should begin a publication of scientific data exclusively on micromedia. With grants from the National Science Foundation and the Ford Foundation, “Wildlife Disease” was created on first microcards, then microfiche. One of the consequences of participating in this new media, was that to qualify for the grant, WDA had to become a more stable society. For that reason, a committee drew up a constitution and by-laws, and officers were elected. Additionally, part of the agreement to participate

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in the experiment was that WDA would not have to raise the \$1 annual dues. Because of the low cost of membership and publicity from the AIBS, membership increased dramatically during this time. If it weren't for the microfiche, WDA may have looked quite different.

Of course, microfiche did not stand the test of time, for a number of reasons – costs of silver, postage rates, necessity or microform readers, and new technology on the rise – but Carlton felt that the effort had still been worth it, because it boosted public awareness of the association and increased our membership, and showed our effort demonstrated. Surely, he would be pleased that our rates have not risen too steadily over the years, and with the efforts made to encourage global membership and access to the Journal of Wildlife Diseases, particularly now, as we experience a global pandemic. Additionally, the microfiche has been digitized, and is available in the member area of wildlifedisease.org.

As Carlton was seeing WDA through editorial and structural changes, his career was also varied and prolific. During his scientific career, he published over 125 papers and multiple book chapters, and received numerous awards, including the Distinguished Service Award of the Department of the Interior and an Honorary Diploma of the American Veterinary Epidemiological Society.



Photo credit: Google Images

In addition to being a member of over a dozen societies, and an active member in his local community, his "hobby" with which most WDA members are familiar with was woodworking. Carlton was a member of the International Wood Collectors Society, and associate editor of World of Wood for many years, and he fused his great love of woodworking with WDA permanently when he presented WDA with a gavel set which he had designed. This set is held in the custody of the president during their term, and ceremoniously used to open the annual business meetings.

The description of the gavel set, written by Carlton and passed along with the gavel, reads as follows:

Donated to the Association on 20 August 1981:

Containing box made of cherry (*Prunus serotina*) purchased from commercial dealer in Maryland.

Sound box top (hollow) made from spalted (fungus-infected) pecan (*Carya illinoensis*) collected from a limb struck by lightning in North Carolina.

Base made from wormy chestnut (*Castanea dentata*) killed by blight, from old fence post in Pennsylvania.

Gavel is of one-piece design to denote the stability and singleness of purpose of WDA. It is made from a piece of Mountain mahogany (*Cercocarpus* sp) collected from the Sierras in northern California in 1949 during a field trip when the possibility of forming a wildlife disease organization was first dreamed of.

It seems there are many lasting legacies we can appreciate of Carlton, and he has certainly left his mark. His intention with the Fund, however, was to give a greater platform to those who have knowledge of the effects of disease and changes at the population level, and for that, we should look to the [list of the fund's recipients](#) over the years, beginning with Dr Julio Carrera, through the 2019 speaker Pieter Johnson, whose topic was "Why disease ecology needs behavioral biology." These scientists have fulfilled his request that WDA maintain an interest in his zoomed-out, forest-and-the-trees concerns for wildlife and human health and disease, and he would surely be pleased to find that this focus can now go on in perpetuity.



Wildlife Disease Association gavel and sound box, created for and presented to the association by Carlton Herman

CONGRATULATIONS TO OUR STUDENTS

WDA-IAAAM Student Award

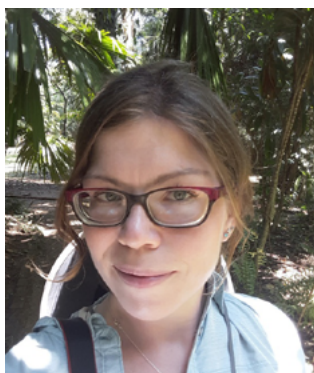
Congratulations to Molly Martony



Molly is the winner of the Wildlife Disease Association-International Association of Aquatic Animal Medicines joint award for the best aquatic animal manuscript published by a student in JWD in 2020. Molly's paper, Esophageal measurement of core body temperature in the Florida manatee (*Trichechus manatus latirostris*), was published in the January 2020 edition, Volume 56(1): 27-33. For more information on this joint award go [HERE](#).

BioOne Ambassador Award Competition

Congratulations to Kaylee Byers



Established in 2018, the annual BioOne Ambassador Award is given to early career researchers who can effectively communicate the importance and impact of their research to the public. The WDA as partner publisher of BioOne nominates individuals who are currently students or within 5 yrs. post completion of

their primary or secondary degree and have published or had their manuscript accepted for publication in JWD within the previous calendar year.

Kaylee was one of five early career scholars who advanced through this rigorous BioOne Ambassador Award competition. Nominees had to be in or within 5 years of completion of a graduate program and must have had their paper published in their association journal in 2020. Candidates were judged on a 750-word plain-language summary explaining "How does your research change the world".

Kaylee's summary: *Location, Location, Location: Rats, Real Estate, and Public Health* is based on her publication "Is Carriage of *Leptospira* Interrogans by Rats Influenced by the Urban Environment or Population Density?"



For more information about the competition and to read Kaylee's winning summary of her work as well as this year's other Ambassador Award winners please click [HERE](#).

To watch a short video describing Kaylee's research click Here. <https://www.youtube.com/watch?v=FPNuTqCeyF8>

Experiment Crowdfunding Time is Here!



The WDA is once again partnering with the crowdfunding site [Experiment](#) to run a Wildlife Health and Disease challenge grant. During the 2020 challenge grant researchers raised more than \$31,000 in support of 7 projects.

To be eligible proposals must meet the following criteria:

1. Involve a significant health or disease issue in free-ranging marine or terrestrial wildlife.
2. Have implications for wildlife populations and ecosystems in which wildlife live.
3. Emphasize species conservation or application of a One Health approach.

The crowdfunding process is different from traditional grant funding. Successfully crowdfunded grants are typically smaller grants for smaller projects, and they should be written to appeal to the public rather than to scientists. The median amount raised for successful proposals is \$4,000-5,000.

Experiment puts out the initial call and coaches researchers through the process of getting their grants ready for the

crowdfunding campaign. WDA and Experiment will review each proposal for eligibility and clarity. The Campaign will launch on May 31, 2021, and it is the responsibility of the researchers to take advantage of the coaching provided by Experiment to ensure that their grant succeeds.

Although both Experiment and WDA publicize the campaign, grant submitters bear the primary responsibility to find supporters and advocates as well as to promote and publicize their grants. On-going coaching by Experiment will be provided.

In addition to the amount raised from the crowdfunding, WDA will provide 6 incentive prizes for those projects that have the greatest number of donors regardless of the actual amount raised.

On day 21 of the campaign two prizes are given. If the Primary investigator is a WDA member then each prize is worth \$250 more.

- 1st place: \$1250 for projects where PI is a WDA member, \$1000 for PI's that are non-members
- 2nd place: \$750 for projects where PI is a WDA member, \$500 for PI's that are non-member

Experiment Crowdfunding Time is Here!

On the 30th day of the campaign, an additional four prizes will be awarded to the top 4 proposals (excluding the 2 winning proposals from the 21st) with the greatest number of supporters and whose primary investigator is a WDA member:

- 3rd-6th place: \$250 for projects where PI is a WDA member

Key Dates are:

April 7 – May 9 – Grant preparation and Submission (May 9 submission deadline)

May 17 – May 30 – campaign coaching and strategy development period with Experiment staff

May 31 – Crowdfunding campaign kick-off

June 21 – day 21 of the crowdfunding campaign – bonus funds awarded by WDA

July 2 – Crowdfunding campaigns end and 30-day awards – bonus funds awarded by WDA

If you have questions concerning the process please contact support@experiment.com or Nicole Sharpe nicolasharpe@experiment.com.

More info here, <https://www.wildlifedisease.org/wda/ABOUTWDA/CrowdfundedGrants.aspx> and <https://experiment.com/grants/wda2021>.

Examples of past successful crowdfunding grants:

- [Is habitat quality a key factor in determining whether koalas develop chlamydial disease?](#)
- [Can We utilize natural bat colony behavior as a vaccination strategy?](#)
- [Building an active surveillance system for lead in Northeastern wildlife](#)
- [Which marine mammal eats the most microplastics?](#)
- [Is lead toxicity a contributing factor to large scale songbird population decline?](#)
- [How do different strains of canine distemper virus alter disease outcomes for wildlife?](#)
- [Probiotics for wild boreal toads facing a deadly fungal disease](#)
- [Investigating the role of innate immune function in snakes battling fungal disease](#)

#CUENCAVIRTUAL2020

Save The Date: The 69th WDA / 14th EWDA - Joint Virtual Conference - Cuenca, Spain is coming soon -August 31 - September 2



**Managing Wildlife Diseases
for Sustainable Ecosystems**

Here is a list of the Invited Speakers you will not want to miss:

1. [Understanding pathogen transmission in a solitary, secretive carnivore \(*Puma concolor*\)](#)

Prof. Meggan Craft, PhD

Associate Professor, Department of Veterinary Population Medicine (VPM)
College of Veterinary Medicine University of Minnesota, USA

2. [Reservoirs Sans Frontières: can ecology help us predict viral spillover risk from bats?](#)

Dr. Olivier Restif

Cambridge Infectious Diseases Department of Veterinary Medicine
University of Cambridge, United Kingdom

3. From Conservation Medicine to Planetary Health: can we move beyond the brand addressing emerging infectious diseases in the time of COVID19?

Prof. A. Alonso Aguirre, DVM, MS, PhD

Chair of the Department of Environmental Science and Policy George Mason University, Virginia, USA

4. Wildlife through the lens of One Health: An African perspective

Prof. Anita Michel, BVSc, DVM, PhD

University of Pretoria, South Africa

5. The Ecology, Economics and Evolution of Emerging Pathogens

Prof. Andrew P. Dobson

Department of Ecology and Evolutionary Biology
Princeton University, New Jersey, USA

Statement from the Wildlife Disease Association on WHO-China Report on SARS-CoV-2

“Wildlife is once again connected to the emergence of a pathogen with serious consequences for human health. We hope that future research and investigations, more than a “blame-attribution” will focus on the importance of protecting wildlife and ecosystem health as an essential premise for a sustainable future. We are in need of a transformative change in the way we use and interact with wildlife and the time to act is now”

- Prof. Dr. Carlos das Neves, President of the Wildlife Disease Association.

The World Health Organization has released its China-Mission report, where among several hypotheses behind the origins of SARS-CoV-2, it ranks an animal reservoir as the most likely origin (probably bats and perhaps some other intermediary mammals). The WHO report also focuses on the wildlife trade and wild animal farms as potential elements in the chain of transmission and/or source to this outbreak. Recent outbreaks in

mink farms with COVID19 jumping from mink to humans in the Netherlands highlight this issue.

These findings, as with earlier coronavirus epidemics (SARS, MERS), suggest evolution of a virus in an animal population which subsequently infected and adapted to humans before spreading in an epidemic and pandemic fashion. It is evident that SARS-CoV-2 can be transmitted between humans without a separate reservoir species, so it is essential not to blame any given wildlife species, but instead understand how the interface between wildlife, domestic animals and humans promote these kinds of problems. Indeed, there is strong evidence that intact ecosystems aid in preventing these sorts of pathogen spillovers from wildlife to humans (dilution effect). As such, this should serve as an incentive to preserve natural habitats, sustain wildlife health as essential to the restoration of ecosystemic stability, thereby reducing the rate of emergence of diseases leading to a more sustainable and healthy future. Furthermore, it is essential to be reminded that SARS-CoV-2 may also pose a serious threat to the conservation and survival of some wildlife species.

Unsustainable exploitation of the environment due to among others human induced land-use change, intensive agriculture and animal-based food systems, growing trade in and farming of wildlife species and their consumption leads to instabilities in ecosystems and host-microorganism dynamics. Increased intimate contact between wildlife, livestock, and people, potentially lead to emerging pathogens. These problems are not restricted to any single species and the viability of even highly resilient natural populations of animals are now at risk. As recently highlighted in a report by Machalaba, et al., “the lack of proactive stances for wildlife health require a global transition to health-supporting and disease prevention-focused strategies”. There is no international regulatory framework on wildlife health that monitors, predicts and prevents situations that pose high risk for humans and natural environments. Such a framework would require not only the commitment of international organizations, national and regional authorities, but also cooperation of people everywhere.

Statement from the Wildlife Disease Association on WHO- China Report on SARS-CoV-2

Increasing education and awareness about environmental and wildlife health should be at the top of all our agendas.

The Wildlife Disease Association is strongly committed to acquiring, disseminating, and applying knowledge on the health of wild animals, to promoting biodiversity, ecosystem health and nature-based solutions to One Health challenges. WDA's more than 1500 members across the world embody this commitment to support healthy ecosystems, prevent the emergence of infectious diseases, and highlight the importance of healthy wildlife to natural ecosystems, and the critical role of functioning and resilient ecosystems to human health and well-being. These are values that more than ever need to be embraced by society.

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- Homepage Editor: Dr. Sergio Guerrero-Sanchez, Danau Girang Field Centre, Malaysia
- Publication Editor: Dr. Mitsuhiro Asakawa, Rakuno Gakuen University, Japan
- Federation of Asian Veterinary Association (FAVA) related matters: Dr. Tin Tin Myaing, Dr. Tokuma Yanai

WDA-AP UPDATE



WDA-AP new board committee for the 2021-2022 term:

- Chair: Dr. Toshio Tsubota, Hokkaido University, Japan
- Vice Chair: Dr. Seong Chan Yeon, Seoul National University, South Korea

Conference announcement:

The 14th Asian Society of Conservation Medicine/ 27th Japanese Society of Zoo and Wildlife Medicine 2021 Joint Conference

Date: September 21- 24, 2021

Venue: Hokkaido University, Sapporo, Japan Theme: Front line of One Health in Asia

More information:

<https://confit.atlas.jp/ascmjszwm2021?lang=en>

Wildlife Health Connections Podcast

Healthy wildlife, healthy people, healthy environment—it's all connected! Join wildlife veterinarian Dr. Michelle Kneeland and wildlife biologist Vincent Spagnuolo as we explore the interconnections between the people and the issues on the frontlines of wildlife health and conservation today. Featuring veterinarians, biologists, ecologists, epidemiologists and many others, this podcast gives a voice to those who have dedicated their career to the advancement of wildlife health around the world. We take a deep dive and bring you some of the untold stories behind their work, in their own words, and unscripted.



The Wildlife Health Connections Podcast is available on Apple, Spotify, Stitcher, and all other podcast platforms. You can also listen to all the episodes on our website: wildlifehealth.org/podcast

Interested in being a guest and sharing your work on the podcast? We'd love to hear from you! Email us: podcast@wildlifehealth.org

Quarterly Wildlife Mortality Report

April 2021

Written and compiled by members of the U.S. Geological Survey's National Wildlife Health Center.

Bat mortality following extreme weather event in Texas



*Caption: Photos of dead Brazilian free-tailed bats from Victoria, TX (Feb 2021).
Photo Credits: Trey Barron, Texas Parks and Wildlife Department*

Shortly after Texas experienced extreme cold conditions (dubbed "[Winter Storm Uri](#)") in mid-February 2021, the [Texas Parks and Wildlife Department](#) (TPWD) began receiving reports of bat mortality from multiple counties across the state. Additional reports of wildlife mortality were [solicited](#) from the general public by TPWD through the [iNaturalist](#) website. Statewide, the total reported mortality included approximately 30,000 bats. Suspected causes of death include hypothermia, drowning, or trauma sustained falling from roosts. Hundreds of additional bats were taken into rehabilitation facilities with frostbite and clinical signs of pneumonia. These totals, however, were likely underestimates of the total bat mortality associated with this event. Species affected consisted primarily of Brazilian free-tailed bats (*Tadarida brasiliensis*; 80-90% of reports) but also included Yuma bats (*Myotis yumanensis*), tricolored bats (*Perimyotis subflavus*), evening bats (*Nycticeius humeralis*), and yellow bats (*Lasiurus* sp.). Population-level impacts on less abundant and more cryptic species remain unclear. Many of the mortality events are documented

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in the Wildlife Health Information Sharing Partnership-event reporting system ([WHISPers](#)). In Victoria County alone, over 8,600 Brazilian free-tailed bat carcasses were collected from multiple bridge roost locations (WHISPers Event [201132](#)). Numerous other wildlife species were thought to be similarly affected by the extreme cold in the region including over 9,400 cold-stunned sea turtles rescued from the Gulf of Mexico as well as various [fish](#), songbirds, raptors, reptiles, and other mammals. This is not the first time that cold weather has been blamed for large-scale bat mortality in the United States. Death from cold weather exposure among Brazilian free-tailed bats has been previously documented in 2011 (Texas, WHISPers Event [16141](#)), 2015 (Florida, WHISPers Event [17187](#)), and 2020 (Arizona, WHISPers Events [200970](#), [200978](#)) in events ranging in size from approximately 20 to 600 animals. For additional information on bat mortality events, contact Anne Ballmann, aballmann@usgs.gov. Jonah Evans, Krysta Demere, and Nathan Fuller from Texas Parks and Wildlife Department contributed to this summary.

Update on rabbit hemorrhagic disease distribution and disease modeling efforts



Photo credit: Peregrine Wolff

A large-scale outbreak of rabbit hemorrhagic disease (RHD), caused by rabbit hemorrhagic disease virus 2

(RHDV2), involving both domestic and wild lagomorphs began in the spring of 2020 in the southwestern United States and adjacent north western Mexico. As of March 2021, RHDV2 has been confirmed in wild black-tailed jackrabbits (*Lepus californicus*), antelope jackrabbits (*L. alleni*), desert cottontails (*Sylvilagus audubonii*), mountain cottontails (*S. nuttallii*), Eastern cottontails (*S. floridanus*) and feral (released domestic) rabbits (likely *Oryctolagus cuniculus*). The documented geographic range of RHDV2 has expanded and includes 18 municipalities in ten states in Mexico (Aguascalientes, Baja California, Chihuahua, Coahuila de Zaragoza, Durango, Mexico, Querétaro, San Luis Potosi, Sonora, and Zacatecas), and 70 counties in 11 states in the U.S. (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, and Wyoming). The most recent range extensions in the U.S. include Idaho (Ada County) and Oregon (Clackamas County, feral rabbits). For up to date, continental-scale information on the RHDV2 event in wild and feral lagomorphs, please visit the Wildlife Health Information Sharing Partnership-event reporting system ([WHISPers](#)).

The potential for rapid spread, high mortality rates, and wide host range with RHDV2 are cause for concern for threatened and endangered rabbit populations that are already experiencing declines due to other stressors. Collapsing rabbit populations may have top-down effects, altering plant community growth patterns, as well as bottom-up effects on predators that rely on rabbits as a primary food resource. The U.S. Geological Survey National Wildlife Health Center is currently developing population models to evaluate the effects of RHDV2 on the local scale. We are also developing pathogen spread models to estimate the factors influencing the emergence of RHDV2 into new areas and provide guidance regarding areas of high risk. We have developed a spatially-explicit SIR (susceptible, infected, recovered) population model to simulate the dynamics of rabbit populations. This model is parameterized for riparian brush rabbits (*Sylvilagus bachmani*) to help inform vaccination strategies for this species. Estimates for key model parameters are drawn from statistical distributions to evaluate the effects of uncertainty

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on model outcomes. Preliminary results indicate that host spatial structure and connectivity, as well as assumptions regarding the pathogen transmission dynamics, have significant effects on the extent of outbreaks, and the ability of the population to recover. We plan to extend our work to other threatened and endangered rabbit species. For additional information on RHDV2 modeling efforts, contact Robin E. Russell, rerussell@usgs.gov.

References:

Russell R, Esque T, Gompper M, Roemer G. 2020. USGS. [A Brief Overview of Rabbit Survey Methodology](#).

Chronic wasting disease update



Photo credit: Ian Barker

Chronic wasting disease (CWD) is a fatal, contagious, neurodegenerative disease of cervids (Family Cervidae), including North American deer (*Odocoileus sp.*), elk (*Cervus canadensis*), moose (*Alces alces*), and caribou (reindeer, *Rangifer tarandus*). The disease continues to be detected in new geographic locations and with increasing prevalence in some areas where the disease has been monitored the longest. In addition, population-level impacts attributable to CWD have been documented in western U.S. populations of white-tailed deer (*O. virginianus*, [Edmunds et al. 2016](#)),

mule deer (*O. hemionus*, [DeVivo et al. 2017](#)), and elk ([Monello et al. 2014](#)). Currently the disease has been detected in free-ranging and/or commercial captive cervids in 26 U.S. states, three Canadian provinces, South Korea, Norway, Finland, and Sweden. During the 2020 sampling year, CWD was documented in free-ranging deer and elk populations in 34 new counties in 15 states in the United States. These detections were made in Arkansas (one county), Iowa (two counties), Kansas (four counties), Minnesota (one county), Mississippi (two counties), Missouri (two counties), Montana (five counties), Nebraska (one county), North Dakota (two counties), Ohio (first free-ranging detection in the state, one county), Pennsylvania (one county), South Dakota (four counties), Tennessee (one county), Virginia (four counties), and Wisconsin (three counties). Complete 2020 surveillance results for free-ranging cervids in Canada are not yet available. The distribution of CWD in commercial captive cervid facilities has also expanded, with 23 new facilities in 10 U.S. states in 2020. Captive facility detections during calendar 2020 occurred in Colorado (two), Kansas (two), Minnesota (two), Montana (two), Ohio (one), Pennsylvania (nine), South Dakota (one), Texas (one), Utah (one) and Wisconsin (two). During calendar 2020, CWD was detected in 15 new facilities in two Canadian provinces: Alberta (10), and Saskatchewan (five). To date, CWD has been detected in a total of 147 commercial captive cervid facilities in the U.S. and 128 in Canada. The U.S. Geological Survey (USGS) National Wildlife Health Center (NWHC) maintains updated [maps](#) showing the current documented distribution of CWD in North America and the overlap between CWD and tribal lands in the U.S.

Chronic wasting disease attracted attention in the 116th U.S. Congress in 2020. America's Conservation Enhancement Act ([PL 116-188](#)) calls for the U.S. Secretaries of Agriculture and Interior to establish a "Chronic Wasting Disease Task Force." The statute calls for a "Chronic Wasting Disease Transmission in Cervidae Resource Study" to be conducted by the National Academies of Science, establishment of the Task Force, and development of an "Interstate Action Plan" to "ensure consistent and coordinated

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management and focused, prioritized research to stop the spread of and mitigate the impacts of chronic wasting disease.”

Additional information regarding CWD is available from [NWHC](#), the [U.S. Department of Agriculture – Animal and Plant Health Inspection Service](#), and the [U.S. Centers for Disease Control and Prevention](#). For additional information on CWD, contact Bryan Richards, brichards@usgs.gov.

References:

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- Edmunds DR, Kauffman MJ, Schumaker BA, Lindzey FG, Cook WE, Kreeger TJ, Grogan RG, Cornish TE. 2016. Chronic wasting disease drives population decline of white-tailed deer. PLoS One. 11(8): e0161127. <https://doi.org/10.1371/journal.pone.0161127>.
- Monello RJ, Powers JG, Hobbs NT, Spraker TR, Watry MK, Wild MA. 2014. Survival and population growth of a free-ranging elk population with a long history of exposure to chronic wasting disease. J Wildl Manage. 78(2):214-223. <https://doi.org/10.1002/jwmg.665>.

For additional information on the USGS National Wildlife Health Center see the following links:

- Main website: www.usgs.gov/nwhc.
- Disease Investigation Services: www.usgs.gov/nwhc/services.
- Report Mortality Events and Submit Specimens: www.usgs.gov/NWHC/submit.
- To view, search, and download historic and ongoing wildlife morbidity and mortality event records nationwide visit the Wildlife Health Information Sharing Partnership event reporting system (WHISPers) online database: <http://whispers.usgs.gov/>

Student Corner



Dear WDA students,

The Student Activities Committee of the WDA would like to announce the WDA Student Travel Grants 2021. The purpose of this fund, for this year, is to provide small scholarships to individual WDA student members who plan to attend the annual WDA conference, especially to those who may not be eligible to apply for the competitive WDA student awards. This year's conference is 100% online and grants will cover the subscription fees. The applicant review committee will award funds based on demonstrated interest and involvement in WDA as well as financial need. Funds will be disbursed to award recipients upon confirmation of student conference registration. Students attending the conference on a scholarship will be asked to share their experience by giving a presentation at their home university (WDA Student Chapter or similar student group) during the fall semester following the conference. Please note that students who have previously received a travel award or are awarded a WDA Student Award this year are not eligible for this year's travel award. Deadline for submission of the application form and a letter of support is May 30, 2021. Applications should be sent to [Marianthi Ioannidis at wdatravelgrant@gmail.com](mailto:wdatravelgrant@gmail.com). All student applicants will receive a notice of successful receipt of their application. Notification of awards will be made by June 15, 2021.

Save the Date:



70TH ANNUAL INTERNATIONAL CONFERENCE
WILDLIFE DISEASE ASSOCIATION
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