



SEARCH

**Publications Links****WDA Publications****Publications For Purchase****Journal of Wildlife Diseases**

- [Online Journal](#)
- [Press Releases](#)
- [Online Submission and Review](#)
- [Author Video Guidelines \(JWDV\)](#)
- [Author Charges and Payment Information](#)
- [Advertise in JWD](#)
- [BioOne Report](#)
- [Altmetrics](#)

**JWD Supplements****JWD Aquatic Animal Articles****WDA Newsletter**

- [Current Issue](#)
- [Archive](#)

**Proceedings of Conference Publications****Reports from the Field - Open Access**

# Newsletter

October 2018

## Update of African Swine Fever in wild boar in Europe & Asia

Dr. Laura Iacolina, currently leading the working group on communication and dissemination of [ASF-STOP COST Action](#)



Picture of an ASF infected pig. Photo credit: The Pirbright Institute, Surrey, UK.

African swine fever (ASF) is a devastating infectious disease of pigs that also has high lethality in the Eurasian wild boar. The economic impact of ASF is high because of the losses it causes in the affected pig farms, the costs of control and eradication, and due to the restrictions in the pig trade within and outside the involved countries. Very recently, the second largest EU pig farm was completely culled - 140,000 pigs - in Romania as a consequence of the introduction of ASF. It is estimated that over one million pigs worldwide have been culled or die from ASF.

ASF entered the Caucasus in 2007 and later spread to neighboring countries, including Russia. In 2014

the disease entered the EU, with the first reported cases in Lithuania and Poland. After expanding in Lithuanian, Latvian, Estonian and eastern Polish wild boar populations, ASF spread in 2017 throughout Ukraine and reached North-western Romania and Moldova. ASF jumped 400-500 km from the closest known infected areas into the Czech Republic where around 70 wild boar cases have been reported in 2017. In 2018 the disease reached Hungary, Bulgaria and, few weeks ago, Belgium, 1000 km away from the closest known ASF area ([news article](#)). This pattern demonstrates the difficulties of controlling ASF in wild boar and in Europe, but also the importance of human activities causing long distance "jumps" of the virus into new areas.

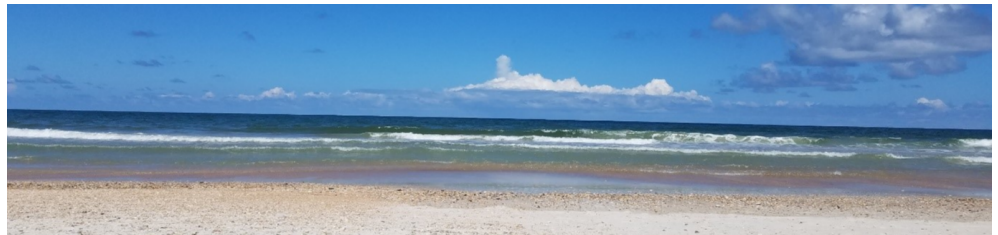
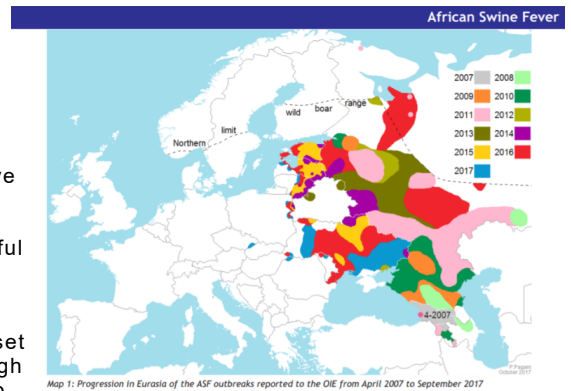
In China, where ASF was first reported this summer, the disease has involved six provinces in a few weeks' time. The area includes provinces thousands of kilometres apart, highlighting the importance of biosecurity measures for farms, but also for vehicles transporting both live animals and pork products. This emergency situation has led to a lockdown of Northern China's pig industry that is causing concerns for the economy of the area and for the food supply on large scale, as China is a major importer/exporter of pork products. An emergency UN meeting

Map credit: ASF-STOP/Dutch Wildlife Health Center publication.



was called after nine cases were confirmed.

The control and eradication of ASF remains a major global challenge, highlighting the importance of international cooperation, prompt reaction after detection and preventive measures such as biosecurity and wildlife disease surveillance network. In Czech Republic, the most successful European example, they established concentric areas with increasing risk with different level of activities to prevent further spread. A fence was set up around the core area, while the high risk zone was initially classified as no entrance. Hunting activities were strictly regulated and active monitoring of carcasses was implemented. Belgium is now looking to their example in an attempt to contain the disease.



## WDA 67th International Conference in St Augustine Summary

Thanks to all who came to the 67th annual conference in St Augustine, Florida, USA, hosted by the University of Florida/ Institute of Food and Agricultural Sciences (UF/IFAS). The conference was held over five days at the World Golf Village Renaissance Hotel. The theme this year was "Connecting Wildlife Health, Conservation, and Management in a Changing World," and that was illustrated throughout the conference program. This year we brought together approximately 350 attendees from 27 countries.

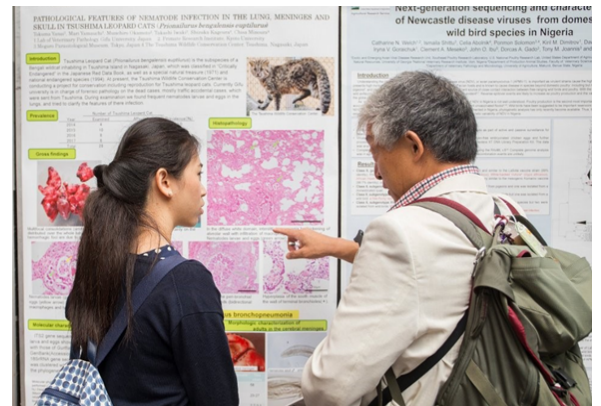


The plenary sessions included speakers Carlton Ward, from the National Geographic Society, Jack Payne of UF/IFAS, Rich Chapman of the USDA, and Thierry Work, of the USGS. Following those speakers were sessions on Outbreak Investigation and Response, and Global Wildlife Health Capacities. It was a motivating Monday to say the least!

Tuesday were the student presentations, and they once again were able to impress the entire conference with their passion for their research and the high bar they set for one another. The Student Research Recognition Award went to Sarah Sapp of the University of Georgia, for her work on *Baylisascaris procyonis*. The poster sessions for students also included inspiring work, and for the first time ever there was a high school student presenter, Madison Toonder, who worked through the University of Miami. Madison was also recognized at the conference banquet for her achievements.



Madison Toonder, youngest presenter



Conference attendees during general poster session

Wednesday had split sessions, on Emerging Diseases and Conservation of Herpetofauna, Effects of Catastrophic Events on Wildlife, and Technological Advances in Surveillance and Medicine.



Picture 1) Ania Tomaszewicz Brown (WCS): Development of a Rapid CDV Test Using Portable, Smart-Phone Driven, Molecular Diagnostic Technology



Picture 2) Nancy Boedeker (Indiana DNR): Identification and Geographic Distribution of *Babesia* spp in Mesocarnivores in Southeastern Massachusetts

Thursday began with three very exciting and engaging presentations from Chris Walzer of WCS, Sarah Funck from FL Fish and Wildlife, and Jon Paul Rodriguez of the IUCN Species Survival Commission. Later, there were split sessions on the Interface of Wildlife, Humans, Livestock and Companion Animals, and Marine Health, followed by Vector Borne and Zoonotic Disease, and the AAWV/AAZV joint session: Veterinary Challenges in Field Conservation. The general poster sessions were also quite well attended.



Friday morning there was a session on Welfare, Microbes, and Management of Wildlife Disease, followed by Rehabilitation Centers as Sentinels for Wildlife Population Health and concurrently, a Cervidae Health Science Symposium.





Certainly, we can't forget to reflect on the good times had by all at the social events! The welcome social, student-mentor mixer, picnic, and auction night were all well-attended. The auction raised around \$9000! \$4200 will go toward the JWD endowment, and \$5000 toward student activities.



The University of Florida Student chapter chose to share the \$1000 WDA 'thank you' donation to their chapter with the University of Georgia and University of Tennessee chapters that pitched in.

As usual, there were many bright minds and excellent colleagues to celebrate, here is a rundown of the awards presented:

#### Student Awards

Presented by Tiggy Grillo, chair of the Student Awards Committee:

#### Oral Presentation Winners

Terry Amundson Award: Charlie Bahnson, University of Georgia

Terry Amundson Honorable mention: Molly Martony, University of Florida



#### Poster Presentations Winners



Best Student Poster: Kayla Kauffman, University of Wyoming

Honorable mention Poster: Amanda Dolinski, Michigan State University



#### WDA Annual Awards and Recognition



Clockwise from top left:

Team Florida Organizers Samantha Gibbs and Samantha Wisely present Lisa Shender with an award for her leadership in organizing the 2018 WDA Annual International Conference.

Chair of WDA Awards Committee Jim Mills presents Marcella Uhart with the WDA Ed Addison Distinguished Service Award.

Jim Mills presents Ellis Greiner with the WDA Emeritus Award.

WDA President Deb Miller and AAWV President Mark Drew present Lisa Wolfe with the Tom Thorne – Beth Williams Memorial Award.

WDA President Deb Miller presents service recognition plaque to outgoing WDA Council member Alonso Aguirre.

WDA President Deb Miller presents service recognition plaque to outgoing WDA Council member Mark Drew.

For more information on these awards, please visit the Awards and Recognition [webpage](#).

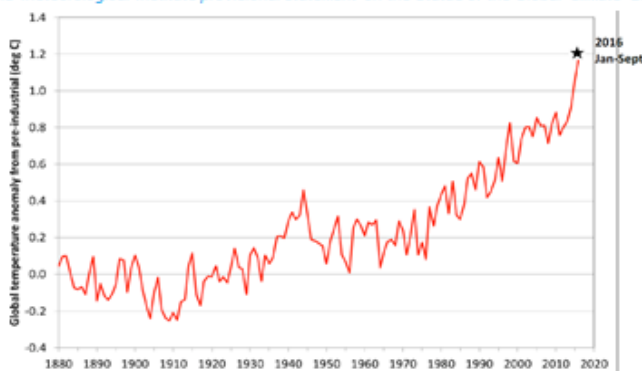
## **WDA Looks Toward Increasing Sustainability of All WDA Operations**

*David A. Jessup*  
*WDA Executive Manager*

The subject of environmental footprint has come up in a number of Wildlife Disease Association venues and discussions over the last year or so, and it is clear that many members may not know about the efforts we are already making in this area. WDA's motto is "All Wildlife Diseases, All Conservation, All One Health, All the Time!" Part of our commitment to conservation and improving wildlife health includes decreasing our environmental footprint, or resaid, increasing the sustainability of our activities. A completely holistic look at this could get very complicated. But energy usage and its contribution to global climate change, although not the only measure to consider, can provide us some useful concepts, and is certainly relevant to some of WDA operations. (First 3 graphs provided by Thijs Kuiken)

## Important consequence of anthropogenic activities: global temperature change, 1880 to 2016

(World Meteorological Institute provisional statement on the Status of the Global Climate 2016)



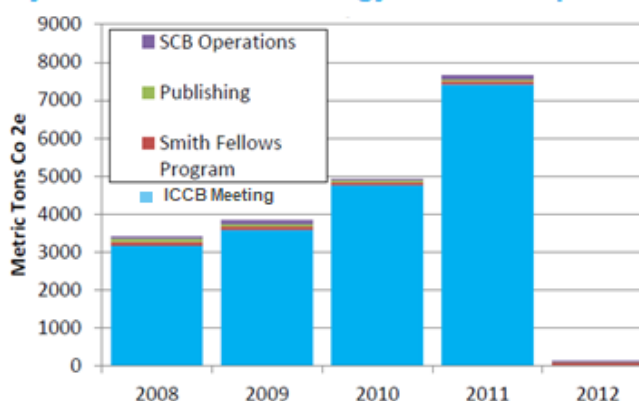
contributions to global warming are likely primarily through the process of producing Journal of Wildlife Diseases (paper pulp, packaging, fossil fuels, transportation); conduct of conferences (fossil fuels for travel, supporting hotel operations, food waste, packaging debris, etc); WDA business operations (Editor, Executive Manager and Officer travel and activities); and maybe some contributions from other things we do (compiling and emailing weekly News and Announcements and quarterly WDA Newsletters, committee activities, granting, and student support efforts). WDA, being a fairly small organization, has not commissioned its own energy audit or sustainability analysis, but we can take useful lessons from the efforts of larger organizations. The below shows the Society for Conservation Biology carbon footprint (a surrogate for energy consumption) for 5 years, including one year where no conference was held.

### Conferences

Clearly conferences are a major contributor to carbon footprint but are also one of the most useful and beneficial 'products' for members, particularly younger members seeking mentorship and experience. And, it may be a fallacy to assume that people attending conferences would not use energy if you didn't hold your conference. If people go to WDA conferences for education, making professional contacts, and/or to see something new or interesting, would they just go to a different conference if WDA didn't hold one? Would they go on vacation? Would their energy consumption really be less? Clearly, we (WDA) can't control what our members do, but we can influence them, and we can provide less energy consumptive conferences. We can help show them the way.

The  
subject of

### Society of Conservation Biology carbon footprint



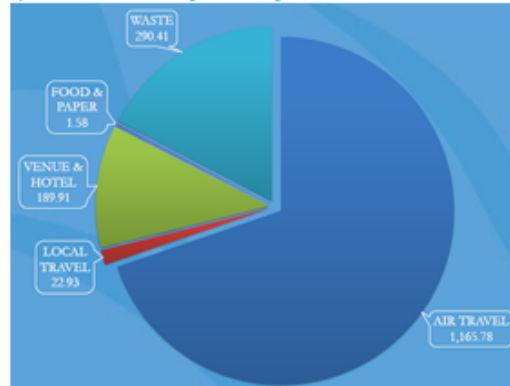
conference energy footprint came up at the recent EWDA conference and an ad hoc committee to investigate it is being considered. But, for almost 10 years WDA has experimented with various ways of reducing energy use and waste at conferences. In some years we asked people to bring their own mugs, in others we provided a drink cup in the conference bag to avoid Styrofoam or paper. We have worked with conference hotels to reduce waste (with variable success). A number of good conference greening efforts were made, including use of recycled materials to make conference bags, at the European Section's recent conference in Thessaly, Greece. EWDA also experimented with projecting posters rather than printing them (it didn't work very well). In most years we have only offered printed proceedings for the small number who really want and/or need them, providing that information to the majority on jump drive, app or by link.

In 2011 we experimented with recording the first couple days' talks and providing them at the WDA website (it was expensive, member usage was low, but user format was primitive). We have offered conference attendees opportunities to contribute to carbon offsets, or conference specific greening opportunities (revegetation of the Rio Grande riverine corridor in New Mexico).

Our experimentation has been instructive, but now we need to pull together our experiences and make information more available to conference attendees and conference hosts. Over the next several years we will be trying to implement changes that will considerably reduce our conference energy footprint.

## Travel to Conferences

**Breakdown of 2017 ICCB meeting carbon footprint in Colombia, with ~1200 participants** (ton CO<sub>2</sub> equivalents)



Above is the carbon footprint of Society for

Conservation Biology conference of 2017. As can be seen, air travel contributes about 70% of the total. Some alternatives are less frequent conferences, selecting conference venues that minimize air travel, optimize less energy intense local transportation, virtual conferencing, and purchasing carbon offsets. But something that WDA has pioneered is regionalization of conferences, holding several smaller conferences yearly, so that trans-ocean air travel can be minimized. This is often overlooked, and would seem to have significant potential.

Thijs Kuiken has recommended a paper "Sustainable Science? Reducing the Carbon Impact of Scientific Mega-meetings" (Ethnobiology Letters, 2011;2:65-71). It shows that an alternating schedule of national and regional meetings can reduce related CO<sub>2</sub> emissions up to 73%. Assuming the proportions for air travel, waste, hotel, local travel etc. are similar, how much more sustainable (and energy/climate sparing) is having a WDA Conference in Florida (or California or Mexico for that matter) for 300-400, largely attended by North Americans; and a conference in Greece for 195 attended largely by Europeans and folks from the Mediterranean region; and one in Bali for about 150-200 attended largely by Australasian and Asian Pacific colleagues? The total attendance is about 750-800 (like WDA's total in 2018), with far fewer airline ocean crossings required. If we wanted to do an actual pertinent comparison we could calculate trans-ocean airline carbon footprint of WDA's three smaller meetings in 2018 with a single similar sized conference (750-800) for an entire organization, like AAZV-EAZWV this year in Prague or last year in Atlanta. Whatever we use for comparison, it appears regionalization of conferences is something positive that can be done to reduce the largest contributor to professional society conference carbon (energy) footprint.

Smaller regional meetings have other advantages. They can be held in places nearer to nature, at a more human scale, and can accommodate regional interests, customs and languages. They can be more personal (no 8-12 minutes talks, or triple split sessions), and allow more time for students and special topics. They also reduce our environmental impact and help us live up to our motto.

WDA has already gone further than many other organizations. Several of our regional (Section) meetings (EWDA, LAWDA and NWDA) are already every other year. And in many years the WDA-A meeting is one many folks drive to and camp at. The WDA pattern of meetings and conferences did not develop solely out of concern over sustainability, but it could be argued that their development for cost reasons, time constraints, and respect for local interests and customs, has been a surrogate for sustainability. WDA can be justly proud that its pattern of conferences is likely greener than most.

## Other WDA Efforts to Increase Sustainability

One of the recommendations coming out of the 'Futures Committee' process is investing in virtual conferencing capabilities. The recording of presentations and sharing of them in some secure and efficient format. This is not as easy as it may first sound. Concerns have been voiced about compromising unpublished data, intrusion of critics or opponents of wildlife research, and loss of ability to have frank discussions. But, WDA is going to continue to experiment with this at the WDA 2019 Annual International Conference in North Lake Tahoe, California. U.C. Davis will be doing the recording and we are considering the most efficient and secure means of distribution.

Another WDA effort toward increasing our sustainability is encouraging movement toward receiving JWD online. Online content delivery is not free. About 60-65% of costs associated with the JWD would remain even if we went to online only, and some current

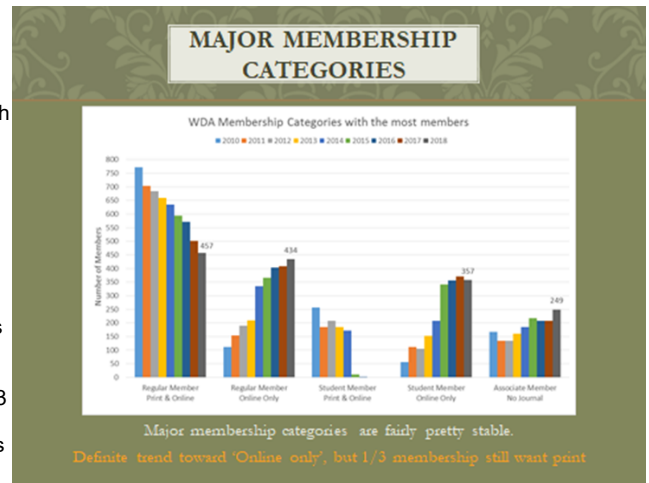


revenue streams (advertising and other author paid fees) would be eliminated. Another future alternative may be 'print on demand' or other small batch printing options.

As seen above, the last 10 years show a very clear trend, and we have now just about reached the 'crossover point' where we have about as many regular online members as regular online plus print. Since essentially all student members and associates only get JWD online, only about 1/3 of WDA regular members, and about 1/3 of institutional members, now get print. A recent cost analysis has shown that the cost differential for print

memberships was not sufficient to support the extra costs of printing, assembly, packaging, mailing and storage. So starting in 2019, WDA members who want print will need to pay \$40 more, so other membership categories are not subsidizing those who want print. This adjustment, and an aging membership, may move us to the point where JWD is essentially an online journal in the next 10-15 years.

JWD has also joined the Forest Stewardship Council to assure all paper products are sustainably harvested. And we will be moving away from plastic wrapping of JWD, to the extent allowed by US Postal regulations.



### Where do we go from here?

It's easy to find fault with one aspect of a conference or another, various travel related issues, room temperatures too cold, too much plastic or paper waste, food wastage, etc, etc. But, Team California has vowed to take this on in a big way for the 2019 WDA Annual International Conference. This includes a venue that requires almost no climate control; yoga studio, gym, volleyball, swimming tennis and hiking all on grounds; 1 ½ miles private trail into town; bikes for local transportation; airport shuttle; and rooming, catering and drink services that are expressly green (no plastic bottles or styrofoam cups, all waste recycled). Beside winning gold and silver local chef competitions, Granlibakken has won multiple awards from the State of California for 'greening' of conferences. Our 2020 conference hosts in Spain have similar goals.

As noted, in New Mexico in 2014 we set aside some conference fees toward native plant restoration along the Rio Grande. Supporting more direct local conservation efforts is another thing WDA may consider in the future. WDA takes its commitments seriously, it takes your concerns seriously, and we take conservation and sustainability seriously. We hope this makes you proud to continue being a WDA member and assures you we want to 'do well by doing good'.

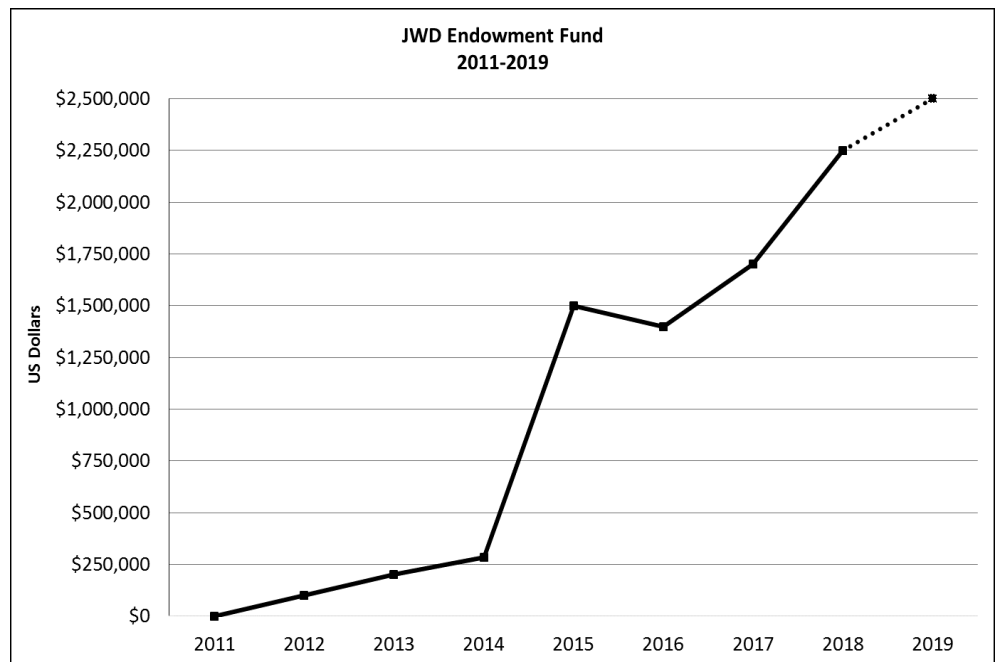
Thanks to Thijs Kuiken and Marie-Pierre Rysser for comments and conversations of this subject.

## 2019 Could be the Year!

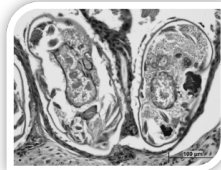
We are closing in on our goal of raising \$2.5 million to endow the costs of publishing JWD, and continuing to allow free access to it in 124 nations with medium to low per capita GDP. The income from this endowment will provide WDA with a third steady source of funding that will allow us to add member benefits and programs in the future, while:

- Keeping all current member benefits
- Keeping membership costs low
- Supporting students
- Supporting international
- Sections and membership

We have an anonymous donor who will match all member contributions to the JWD endowment made during our October 2018 – January 2019 membership renewal drive, up to a total of **\$5000**. So, your contribution could be doubled! We only have a little way left (dotted line), so please consider giving.



Other ways to help include finding a sponsoring agency, organization, company or university (contact [jgaydos@ucdavis.edu](mailto:jgaydos@ucdavis.edu)). Or maybe donating a used car, boat, or RV at: <http://www.careasy.org/nonprofit/wildlife-disease-association---wda>



### Wildlife Health & Pathology Short Course

Taronga Zoo, Sydney  
18 – 23 February 2019

### Translocation Health Symposium



At the Australian Registry of Wildlife Health, we believe that building a trained and collaborative workforce ultimately improves our collective ability to detect and respond to wildlife health threats.

The Australian Registry of Wildlife Health, a research program of the Taronga Conservation Society, has a 33-year history of providing diagnostic services, resources, and training to wildlife health professionals working towards securing a better future for our animals, our people, and our planet.

We are excited to announce an educational event that is both multifaceted, and ambitious. By building on a formula formed through the highly successful delivery of similar courses in 2008 and 2012, and by taking on board participant feedback, we have designed an extensive and intensive training program focused on wildlife health and conservation action sciences.

The program will bring together global and local experts with the aim of forging relationships across wildlife health professionals including those at universities, zoos, agriculture and environment departments, vertebrate pest controllers, wildlife managers, and wildlife rehabilitators.

A Wildlife Health & Pathology Short Course, 18 - 22 February 2019 provides a systematic review of the health and diseases of wildlife, and practical skills based workshops in histopathology, necropsy, and laboratory skills.

A Wildlife Translocation Health Symposium, 23 February 2019 will unite ecologists and health scientists and contribute to a best practice framework for wildlife translocation sciences.

A Satellite Wildlife Health & Pathology Short Course, late February 2019 in Bangkok Thailand, in collaboration with Chulalongkorn University, will further build international wildlife health and conservation networks.



We hope to deliver this unique education program to a passionate and engaged audience, in an affordable manner. Scholarships are available to Australian Students undertaking study focused on wildlife health, and International Professionals already working in this realm.

Information about scholarships, speakers, and registrations can be found on the Registry website: <https://arwh.org/event/wildlife-health-pathology-short-course-2019>

We hope that you will join us.



---

## A Blast from the Past: WDA Recovers Its Earliest Publications



From Microfiche: This photo was taken on Ossabaw Island, Georgia, in the early or mid-1950s when they were developing the CapChur Gun (also called dart gun/syringe gun). The guy on the left is Jack Crockford, wildlife biologist with the Georgia Game and Fish Commission, who actually invented the CapChur gun. Next is Dr. Frank Alfred Hayes, veterinarian with the UGA School of Veterinary Medicine (this was before SCWDS was created and before the School became a College). Next man is unknown, but he probably worked for Georgia Game & Fish or for Eleanor "Sandy" Torrey West,

who owned Ossabaw at that time. Next is Dr. James Hobart Jenkins, wildlife professor at the UGA Forestry School. That deer was not dead; he was one of the first deer ever "shot" with the dart gun. You can see the stethoscope hanging around Dr. Hayes' neck. (Thanks to Gary Doster and John Fischer for the identification and description of the in the photograph)

The Wildlife Disease Association (WDA) was incorporated in 1950 and very shortly thereafter began publishing scientific articles, research findings, longer compilations, and atlases. The first mailed and mimeographed communications were 'Wildlife Letters' from 1950-1959. In 1959 the name 'Wildlife Disease', was chosen for larger more formal publications in microfiche format- a technology coming out of data storage needs of WWII and the Korean War. High altitude photography had resulted in the development of very fine grain films that could store huge amounts of printed data in a small space (Aahhh, the days before the Internet!). Offset printing was expensive and most early WDA members were at universities whose libraries all had microfiche readers (biggest high tech advance since the Dewey decimal system!).

Wildlife Disease was advanced for its day, but microfiche did not remain a popular format, as a special magnifying optical scanner was required (in the days when people went to a library to do literature searching). In the mid-1970's, the WDA began publishing the "Journal of Wildlife Diseases" in a paper journal format and tapered off the microfiche publication. However, many foundational articles in wildlife health and disease (and some extensive atlases and compilations from the past) only saw paper publication in early texts (now out of print) and others were doomed to the purgatory of microfiche.

Some of these early articles include:

Epizootics in Wild Animals in Relation to Populations, Carlton Herman, 1961

Tularemia and Animal Populations: Ecology and Epizootiology, William Jellison, 1961

Pasteurellosis in Rocky Mountain Bighorn Sheep, G. Post, 1962 (foundational to the field)

An Outbreak of Epizootic Hemorrhagic Disease in Wildlife Ungulates in Alberta, G. A. Chalmers, 1964 (again first recorded observation ever)



And hundreds of pages of atlases of parasites in all species, unique outbreaks of diseases in wildlife in India, Europe as well as North America. One of the articles also captures the content of the 9 years of Wildlife Letters that preceded Wildlife Disease, so the collection is a complete summary of written communications in our field based primarily on North American sources.

In 2017, under a WDA Small Grant, Dr. Michael Ziccardi, working with UCD veterinary student Sara Cobos, digitally photographed each microfilm (approximately 3,700 pages), converted each into Adobe Acrobat PDF format, and edited the material to allow for organized, structured curation on the WDA website. This content is now available to WDA members (via the Members Area) as a 'value added' benefit of WDA membership (similar to out of print classic texts).

This effort has captured and preserved some of the earliest and most foundational wildlife health/disease information before it is lost, preserving both scientific knowledge but also for WDA's legacy. It is hoped that this resource can allow current and future wildlife professionals to benefit from this foundational knowledge.

The Wildlife Disease collection is on the WDA Website in the Members Area at: <https://www.wildlifiedisease.org/wda/Portals/0/DocLinks/Wildlife%20Disease%20Catalogue.pdf> You need username and password, and it is just one other example of the many benefits of WDA membership.

---

## Results of WDA's First Crowd Funding Wildlife Health/Disease Grants Call

Many people have heard of 'Go Fund Me' campaigns, but crowd funding is relatively new to science. In June, WDA decided to partner with the goal driven small company [Experiment](#) to try out this new way of funding wildlife health/disease projects. Experiment had run a wildlife disease funding effort in 2017 with pretty good success, but not with sufficient response they felt they could continue on their own. WDA's Futures Committee had identified grant funding for small research projects, particularly those supporting graduate students, as a potential priority. But before recommending it to Council as part of planning for WDA's programs and benefits after Endowment is reached (see "2019 May be the Year") the Futures Committee wanted to try it once as an experiment.

WDA put out a grant call in early July 2018. To qualify grant proposals needed to:

1. Deal with a significant health or disease issue in free-ranging marine or terrestrial wildlife.
2. Have implications for, or a focus on, wildlife populations and the ecosystems in which they live, not individual animal treatment and/or captive wildlife.
3. Emphasize species conservation and application of a One Health approach.

As this was a crowdfunding call, grant applications and the entire process is different from traditional funding, particularly in the way proposals are written, and in funding expectations. Most frequently crowdfunding is successful for student or graduate student, and smaller projects, and where there is urgency for getting work done on emerging issues, or to pump-prime more comprehensive engagement. Average amount raised for successful proposals is in the \$4000 range.

Experiment put out the initial call and counseled and mentored grant proponents. WDA reviewed each proposal for compliance with the calls criteria and some of the nineteen initial proposals were rejected.

Once the group of grants were deemed qualified the grants call went live. The call lasted 31 days (July 1, 2018 - August 1, 2018). Although both Experiment and WDA publicized the grant call, grant proponents bore the primary responsibility for lining up support. This is one big difference between crowd funding and traditional funding. Grant proponents must follow through and promote and publicize their grants, help find supporters and advocates throughout the process. Coaching by Experiment on how to do this proved critical to the success of several projects.

WDA was to provide \$1000 to the most highly supported project and \$500 to the second most highly supported project after 21 days. But we had a tie! Winning projects tied with 134 pledges each. Both Stephanie Norman's project on antibiotic resistance in marine mammals and Wynand Goosen's on Tb in black rhino got 134 pledges and they are splitting the two top prizes (\$750 each).



### Do Pacific Northwest marine mammals carry antibiotic-resistant bacteria from land animals?

Stephanie Norman  
Orca Network

128% funded

Biology



### Combating tuberculosis in African rhinoceros

Wynand J. Goosen  
Stellenbosch University

123% funded

Biology

At 30 days in WDA member author/mentor, prizes of \$100 each were awarded to Henry Adams for his project on Bsal in Costa Rica (48 backers), Terra Evans for Asian elephant herpesvirus work (71 backers), Haley Stannard working on mange in wombats (14 backers), and to Amy Robbins project on chlamydia in koalas (27 backers). By time of publication, all projects have received complete funding!



Is habitat quality a key factor in determining whether koalas develop chlamydial disease?

Amy Robbins  
University of the Sunshine Coast

103% funded

Biology



Are Costa Rican salamanders susceptible to Batrachochytrium salamandrivorans?

Henry Adams  
University of Georgia

152% funded

Biology



Development of non-invasive diagnostics for endotheliotropic herpesvirus in free-ranging Asian elephants

Tierra Smiley Evans  
UC Davis

144% funded

Biology



Dead wombats walking: Seasonal nutrition and mange in free-ranging bare-nosed wombats

Hayley Stannard  
Australia

103% funded

Biology

Funds should be available to winners by approximately October 1, 2018. It is expected that the successful applicants will provide appropriate feedback on the outcomes of the work in the form of 'lab notes' and WDA will post these at its website.

In total, the 17 accepted projects raised \$60,276 and 687 donors got involved. Eight of those projects are now fully funded (or more!) There are 8 more projects still fundraising, and only one project failed. It was a great 'experiment' and may become part of the package of programs to be recommended to Council by the WDA Futures Committee. For more information, and to check out the projects still working on fundraising, see:

<https://experiment.com/grants/wda>

# WDA Small Grants – Call for Proposals

The mission of WDA is “to acquire, disseminate and apply knowledge of the health and diseases of wild animals in relation to their biology, conservation and interactions with humans and domestic animals.”

Recipients of this award will receive funding to accomplish a measurable project that supports the WDA mission.

Proposals are due by January 15, 2019  
Successful proposals will be awarded May 2019

Please see the submission guidelines and example proposal on the links above.

Submit proposals to: [wdsmlgrants2019-2020@gmail.com](mailto:wdsmlgrants2019-2020@gmail.com)



---

## Report on EWDA to WDA Council, September 9, 2018

Marie-Pierre Ryser, Chair, European Section of WDA



There were 195 people from 31 countries at the WDA European Section Conference in Thessaly, Greece, August 26-31, 2018. We had a very packed but also very varied programme starting with a student workshop run in parallel to our traditional EWDA Network meeting on Sunday 26 August. On Monday we had the ECZM annual meeting run in parallel to the pre-conference workshops, and from Tuesday to Friday we had the scientific conferences (altogether I believe there were almost 90 talks, plus a range of posters), apart from a cultural excursion (monasteries) on Wednesday morning followed by a traditional lunch. We had a welcome dinner, a mentor-student mixer, a successful auction to raise money for the students, a banquet at the sea on Friday night, and a lovely excursion by boat on Saturday. Overall it was obvious that our hosts gave all they could to make it a successful conference, and from the feedback we have received by

participants, people seemed to be very satisfied; here both the quality and variety of the talks as well as the great friendship atmosphere were repeatedly mentioned as appreciated features of the meeting. The abstract booklet of the Network meeting and the Conference Proceedings will be posted soon on our EWDA Website.

In addition, we had our EWDA Business meeting at the beginning of the conference, during which we had a small commemoration of Vic Simpson. We also had discussions on the sustainability of EWDA conferences and are now in the process of building an ad hoc committee to address this more in depth and come up with proposals for the future. We also announced the WDA/EWDA-joint meeting in Spain in 2020. The new Board is now in place, with me staying as a chair for two more years (this has been mainly motivated by the fact that otherwise all officers but the treasurer as well as multiple other members of the Board, including Student representative, Website manager and Members at large, would have stepped down at the same time, which would have tremendously disequibrated the Board at a time when we are trying to make the section more structured and stronger in general). Our new vice-chair is Karin Lemberger, and Gudrun Wibbelt has taken over the secretary position, and will be the contact person on the EWDA Board as concerns the coordination for the joint WDA-EWDA Conference in 2020 in Cuenca, Spain.

---

## Africa Middle East Section Update:

Congratulations to the newly-elected Section Officers! This was the first official election of this section.

Chairperson: Stephen Chege

Vice Chairperson: Hana Soualah-Alila

General Secretary: Josheph Maina Gakuha

Deputy Secretary: Vincent Obanda

Treasurer: Annie Cook

Committee Member: Veronica Eyihuri Adetunji

Student Representative: Eduard Roos





The Karen C. Drayer Wildlife Health Center, School of Veterinary Medicine, UC Davis and the California Department of Fish and Wildlife are proud to be co-hosting the 68th International WDA Conference in 2019. This event will be held at the Granlibakken Lake Tahoe Conference Center in Tahoe City, CA from August 4 – 9, 2019. Situated in the High Sierra and on the north shore of beautiful Lake Tahoe, it will act as a wonderful introduction to our proposed theme – “Fostering Resiliency in a Time of Change” – where climate change and political challenges can be discussed as they relate to wildlife health and conservation or management concerns.

Granlibakken (<http://granlibakken.com/>) is a different type of venue for WDA meetings, as it offers an “all-inclusive package” for attendees who stay there. This means lodging, three meals/day, cocktail receptions (e.g., welcome reception,

auction), and banquet will all be included in the lodging rate. A number of housing options will be available – student dorms, hotel-style rooms, townhouse units, studio apartments, and executive lodge units –with different price points for the full spectrum of WDA members.

Granlibakken is also a very ‘green’ venue. The summer mountain climate limits air conditioning. Recycling is extensive and plastic, styrofoam, and single use paper will be hard to find. Recreational activities are all on conference grounds, and a 1.5 mile private trail leads to North Lake Tahoe.

Basic details can now be found on the WDA 2019 website at [wda2019.ucdavis.edu](http://wda2019.ucdavis.edu). Abstract submission, conference registration, and lodging reservations will go live through this site on December 1, 2018.

The Conference Committee looks forward to hosting a highly successful conference!



**Congratulations** to our new officers: Sonia Hernandez as section chair, Julia Burco treasurer, Sandie Black secretary, Adam Hering student representative, Anne Justice-Allen section communications. Please see the WVS [webpage](#) for more information and email addresses.

**Awards:** The Wildlife Veterinary Section selected two individuals to receive travel awards at the Annual Wildlife Disease Association Meeting: I. P. Dhakal, "Assessment of Wildlife Health Capacity in Nepal; Grace Kia, "Rabies and Zoonotic Disease

Risk Awareness Among Bush Meat Hunters in Zaria Kaduna State, Nigeria." The presentations given by the awardees contributed significantly to our understanding of veterinary and public health issues in remote areas with limited resources. Please see the WVS webpage for the abstracts.

## **Please welcome the newly elected Student Member on Council:**

Marianthi Ioannidis  
Utrecht University

Dear worldwide WDA community, my name is Marianthi Ioannidis and I'm really happy to be the WDA Student Representative! I'm currently the Belgium country representative for the European WDA student chapter. Over the course of my studies I really enjoyed taking part in student activities at my university as I saw it a very interesting and fun way to get to know more people while still being involved in my course. For example, in 2014 I joined a student association focused on marine mammals and bird conservation, pathology and medicine. I had the opportunity to take on different roles and to organize many activities with the members. So far, these include, but are not limited to, necropsies, excursions and lectures. Then in 2015 the previous students decided to start a student chapter in Belgium and the year after I became one of the country representatives. That year was special for us because my Flemish colleague (Anna Baauw) joined us too. Our main objective was to create a new connection between the French part and the Flemish speaking parts of our country to allow more collaborations in the future.

We organized different events like Causes of death in marine mammals along the Belgian coast, Bat threatening or threatened, the anatomy of the elephant, and more. Our most successful event and biggest accomplishment to this date was the organization of a 2-day event: Wildlife Conservation, Turning Science into Practice. We had a lot of different nationalities attending this event, most of them were students. This was the real satisfaction: creating an event where people from different countries, different fields,



different cultures, but with the same interest, have the opportunity to meet in the central country of Europe. And I believe that this is what the association should aim to create: a big family. I have been a qualified vet since the beginning of July and my professional interests are mostly oriented in the wildlife pathology area. This interest developed during my studies thanks to the marine mammal stranding network at the university of Liège where I was able to take part in the necropsies during those last 4 years. To pursue this professional interest, I will do a practical as an Erasmus student at the pathology department of Utrecht University starting in January 2019. I also love traveling a lot, I believe networking is essential to develop knowledge and to share experiences, this is why I take every opportunity to travel and to attend international events and workshops.

Regarding the future of the WDA student chapters one thing that I would really love to help

promote is an Asian student chapter. This year I had the amazing opportunity to go to Japan where I was able to work on wildlife pathology at the university of Osaka Prefecture University which gave me a unique perspective on the Japanese student community. There, I met students sharing this same interest. When I was there, I thought to myself: "why are there no student organisations?" It's time now to share and create something with them! I also spent a lot of times in a zoo to practice and noticed the same thing: a big number of students interested in wildlife but without a student organization. If we really want to extend this strong community of the WDA, we can't do it without this huge missing continent. Especially without the younger generation who represents the future. On top of that, Asia could also be a wonderful continent to try to find new mentors for our worldwide students to help expand the student-mentor programme. At least, next to the regular work of a WDA student representative, other small projects could also be carried out. For example, the creation of a common international student calendar. Also each representative visiting a foreign university could try to organize events to promote WDA in universities without a student chapter. It would be a very active way to continue to build this strong student community. We can also expand the use of the new platform that we have: the YouTube channel! We could ask the student chapters of each continent, or each country representative, to create a short video clip showing previous events or announcing upcoming events to help to spread the word.

I'm confident that I can accomplish at least some of these goals and set new goals for the advancement of the student chapter. See you soon!



## The First North American Student Workshop is Back!

We are back! And we need your help to spread the word and share your funding connections! From August 1st to 4th, the 3 days before the 2019 WDA conference in Tahoe City, CA, graduate and professional students can join the first North American WDA student workshop at UC Davis. Our goal is to dive in and beyond the wildlife disease outbreak to gain essential tools for maintaining healthy wildlife populations. We would like to welcome, you, the future wildlife health researcher to our workshop, where you can interact with leading experts in the field.



Photo credit: Google images



The workshop will consist of lectures and hands-on sub-workshops (such as outbreak analysis in R, breaking down the structure and backbone of a wildlife disease outbreak investigations, and population persistence in the face of human and disease pressure). There will also be social time and possibly even an outbreak game! Lodging will be in the dorms at UC Davis with food included. We are currently working hard to keep costs low.

Despite putting a lot of energy and effort into planning last year's workshop, we had insufficient funding by our February 1st cut off and had to cancel. Hereby, we would like to thank the WDA board for their faith in us, and Dave Jessup for his continued support of our efforts and troubleshooting the cancellation.

That said, the team has expanded, and you can connect with any of us to share your suggestions, especially considering funding. We are: Rebecca Hardman (University of Tennessee), Rachel Ruden (Iowa State University), Italo Zecca, Jamie Benn and Skye Sneed (Texas A&M University), Laura Adamovicz (University of Illinois), Shannon French (University of Guelph) and Bienneke Bron (University of Wisconsin - Madison). We are excited to make it happen and hope to see you there!

Check out our website - [www.wdastudentworkshop.org](http://www.wdastudentworkshop.org).  
Sign up for our newsletter or send us an email at [wdastudentworkshop@gmail.com](mailto:wdastudentworkshop@gmail.com)!

---

Have you been wondering if your university has a student section or if there is one in your region? Here is a current list of all active sections, linked to their webpage:

[Australasian \(WD A- A\) Student Chapter](#)  
[European \(EWD A\) Student Chapter](#)  
[Latin American \(L A-WD A\) Student Chapter](#)  
[Southern Africa Wildlife Disease Association Student Chapter \(\*University of Pretoria\*\)](#)  
[Atlantic Veterinary College Student Chapter](#)  
[Colorado State University Student Chapter](#)  
[Kansas State University Student Chapter](#)  
[Michigan State University Student Chapter](#)  
[Oklahoma State University Student Chapter](#)  
[Oregon State University Graduate and Professional Student Chapter](#)  
[Ross University Student Chapter](#)  
[Texas A & M University Student Chapter](#)  
[University of Calgary Student Chapter](#)  
[University of California-Davis Student Chapter](#)  
[University of Florida Student Chapter](#)  
[University of Georgia Student Chapter](#)  
[University of Guelph Student Chapter](#)  
[University of Illinois Student Chapter](#)  
[University of Minnesota Student Chapter](#)  
[University of Pennsylvania Student Chapter](#)  
[University of Saskatchewan Chapter](#)  
[University of Tennessee Student Chapter](#)  
[University of Wisconsin Student Chapter](#)  
[Washington State University Student Chapter](#)

If you don't see your region/ university listed, get started today on creating it with your colleagues! Step 1 is visiting the [WDA Student Chapter page online](#) , and checking out the details.

---

## USGS Quarterly Wildlife Mortality Report

**October 2018**

*Written and compiled by members of the U.S. Geological Survey National Wildlife Health Center - Wildlife Epidemiology & Emerging Diseases Branch.*

## Are Harmful Algal Blooms Harming our Wildlife?

Harmful algal blooms (HABs) have the potential to harm fish and wildlife, domestic animals, livestock, and humans through toxin production or ecological disturbances such as oxygen depletion and blockage of sunlight. To investigate the effects of algal toxins on wildlife, the U.S. Geological Survey's (USGS) National Wildlife Health Center (NWHC) has examined over 300 dead animals collected during freshwater and marine HAB events

since 2000. Varying levels of algal toxins were found in over 100 of these animals. In some cases, the history, clinical signs, and high toxin levels have allowed scientists to attribute mortality to algal toxicosis. Recent events have included Kittlitz's murrelets (*Brachyramphus brevirostris*) in Alaska that died after consuming sand lance (*Ammodytes hexapterus*) high in saxitoxin (Shearn-Bochsler et al. 2014), green tree frogs (*Hyla cinerea*) in Texas with suspected brevetoxicosis in association with a red tide event (Buttke et al. 2018), and little brown bats (*Myotis lucifugus carissima*) in Utah found dead during a HAB event at a reservoir commonly used for recreation and as a source of municipal drinking water (Isidoro-Ayza et al. 2019).

In other cases, algal toxins have been detected in wildlife, but their contribution to mortality remains unclear. Part of the reason these detections have been difficult to interpret is that the toxic dose of many algal toxins in wildlife species is unknown and the microscopic lesions, if any, particularly in birds, have not been well described. To better understand the effects of saxitoxin, an algal toxin that can occur in both marine and freshwater environments, on avian species, the NWHC is conducting two laboratory exposure trials: one to determine the lethal dose of saxitoxin in waterfowl and another to examine the repeated exposure of waterfowl to sub-lethal saxitoxin ingestion. In addition to the exposure trials, a retrospective review of algal toxin detections from NWHC's case archives is underway to identify demographic, spatiotemporal, and diagnostic features associated with wildlife exposure to algal toxins. For more information please contact Bob Dusek (608-270-2403; [rdusek@usgs.gov](mailto:rdusek@usgs.gov)).

#### References:

Buttke DE, Walker A, Huang I, Flewelling L, Lankton J, Ballmann AE, Clapp T, Lindsay J, Zimba PV. 2018. Green Tree Frog (*Hyla cinerea*) and Ground Squirrel (*Xerospermophilus spilosoma*) Mortality Attributed to Inland Brevetoxin Transport at Padre Island National Seashore, Texas, USA, 2015. *Journal of Wildlife Diseases* 54:142- 146.

Isidoro-Ayza M, Jones L, Dusek RJ, Lorch JM, Landsberg JH, Wilson P, Graham S. 2019. Mortality of Little Brown Bats (*Myotis lucifugus carissima*) Naturally Exposed to Microcystin-LR. *Journal of Wildlife Diseases* 55:Epub ahead of print.

Shearn-Bochsler V, Lance EW, Corcoran R, Piatt J, Bodenstein B, Frame E, Lawonn J. 2014. Fatal Paralytic Shellfish Poisoning in Kittlitz's Murrelet (*Brachyramphus brevirostris*) Nestlings, Alaska,

USA. *Journal of Wildlife Diseases* 50:933- 937.

## Double-crested Cormorant Mortality in the Northeast and Great Lakes States

The U.S. Geological Survey's (USGS) National Wildlife Health Center (NWHC) began receiving reports of sick and dead double-crested cormorants (*Phalacrocorax auritus*), predominantly juveniles, from the Northeast and Great Lakes regions of the United States in late July 2018. Affected birds were observed at established rookeries as well as along shorelines and in urban settings; some were taken to wildlife rehabilitation centers. Neurologic signs exhibited included neck weakness, unilateral wing paralysis, incoordination, and tremors. Virulent Newcastle Disease virus (vNDV), an avian paramyxovirus serotype-1 (APMV-1), has been confirmed thus far in cormorants examined from Plymouth County, Massachusetts and Otter Tail County, Minnesota, and is suspected in cormorant mortalities from Barnstable County, Massachusetts; Leelanau County, Michigan; and Marshall County, Minnesota. NWHC and state natural resources agencies are following up on additional reports from wildlife rehabilitation centers in Erie County, Pennsylvania and Cuyahoga, Franklin, and Lorain Counties in Ohio. Although outbreaks of APMV-1 were also reported in backyard poultry flocks in California and Eurasian collared doves (*Streptopelia decaocto*) in Central Plains states this summer, detailed sequence analysis recently completed by the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) National Veterinary Services Laboratories (NVSL) showed that the outbreaks were caused by distinctly different phylogenetic varieties of APMV-1. Further, there may be other factors contributing to the observed widespread mortality of cormorants as specimens from two locations in Maine (Lincoln and York Counties) and rookeries in Dodge County, Wisconsin and Cass and Fairbault Counties, Minnesota were all negative for APMV-1 based on initial molecular screening tests. Virus isolation is underway to further investigate these events. For additional information on these outbreaks, please refer to the Wildlife Health Bulletins referenced below.

#### References:

USGS National Wildlife Health Center. 2018. Update: Avian Paramyxovirus-1 in Double-Crested Cormorants and Eurasian Collared Doves. Wildlife Health Bulletin 2018-04 Update. <https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/UPDATE%20-%20APMV-1%20in%20Double-Crested%20Cormorants%20and%20Eurasian%20Collared%20Doves%202018.pdf>

USGS National Wildlife Health Center. 2018. Avian Paramyxovirus-1 in Double-Crested Cormorants and Eurasian Collared Doves. Wildlife Health Bulletin 2018-04. <https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/Avian%20Paramyxovirus-1%20in%20Double-Crested%20Cormorants%20and%20Eurasian%20Collared%20Doves%202018.pdf>

## New USGS National Wildlife Health Center Website

Beginning in December 2017, U.S. Geological Survey (USGS) leadership initiated the transition to a modern, secure, and mobile-friendly web platform to standardize and update nearly 300 USGS websites. In August 2018, the USGS National Wildlife Health Center (NWHC) was proud to announce the launching of their new website for public use. The new website hosts over 100 newly created web pages and 400 interconnected files and images that provide up-to-date information on the NWHC's emerging wildlife disease projects, disease investigation services, disease surveillance projects, disease management tools, and the Honolulu Field Station. The website focuses on the various data and tools used by the NWHC and partners, including the Wildlife Health Information Sharing Partnership event reporting system (WHISPers), a novel chronic wasting disease web application, various wildlife disease field manuals, reports and newsletters, and other educational and outreach materials. The new website also provides public accessibility to maps on the distribution of various wildlife diseases and highlights NWHC publications, news releases, and staff profiles. Sharing the work, projects, and science performed by the NWHC in a timely and up-to-date manner remains a top priority and the NWHC is proud that the new website will allow for improved and efficient communication. For more information please contact Natalie Nyugen (608-270-2416; [ntnguyen@usgs.gov](mailto:ntnguyen@usgs.gov)).

Check out the new USGS National Wildlife Health Center website at: [www.usgs.gov/nwhc](http://www.usgs.gov/nwhc).

To learn more about the NWHC Investigation Services, check out: [www.usgs.gov/nwhc/services](http://www.usgs.gov/nwhc/services).

*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: <https://www.nwhc.usgs.gov/whispers/>*

*To request disease investigation services or report wildlife mortality: <https://www.usgs.gov/centers/nwhc/science/report-mortality-events-and-submit-specimens>*

