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SAMANTHA GIBBS, EDITOR

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IRA Charitable Roll-Over for JWD



Knoxville Meeting Updates

The University of Tennessee student chapter and faculty advisors are avidly preparing for the 62nd WDA International Conference that will be taking place July 28- August 2, 2013 in Knoxville, TN. The theme for the 2013 conference is: Utilizing Wildlife Health to Conserve Biodiversity in the Appalachians and Beyond.

General: Registration figures suggest we will have about 250-260 attendees. Please see the website for signup for social events, workshops and field trips, but hurry!

WDA is going green in several new ways: 1) paper proceedings will be available only those who order them ahead of time, 2) the program schedule and abstracts of papers will be made available electronically via the conference website, by Ap at the conference, and with an abbreviated schedule of events on the back of your name badge. Also, daily schedules will be posted outside meeting rooms (a retro idea), 3) there will be no jump drives or large bags with conference handouts, but conference tote bags and T-shirts will be available for sale, 4) all serving materials and utensils at the BBQ-Auction will be compostable and local brews will be served.

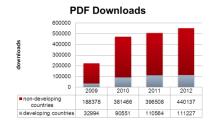
We will have a local historian provide an interesting injection of geographic, historic and other local knowledge. The Tuesday evening BBQ and auction will be held at the Ijams Nature Center. There, you can learn about Tennessee flora and fauna, you will be entertained by a local bluegrass band, and you will be fed on locally famous Dead End Bar B Que.

Students: In the spirit of this theme, the student chapter has planned a 2-day camping trip to the Great Smoky Mountain National Park (GSMNP) where participating students will be camping in Cade's Cove, a scenic and historical area of the GSMNP. Additionally the students will hike the scenic Abram's Falls trail (http://www.nps.gov/grsm/planyourvisit/abrams-falls.htm) and meet with local biologists to discuss current wildlife disease research occurring in GSMNP. Students may also participate in an Introduction to Wildlife Disease Population Modeling workshop. The workshop will be hosted by National Institute for Mathematical and Biological Synthesis (NIMBIos) http://www.nimbios.org/

In addition, the student chapter is organizing various other student activities for the conference including the student profession mixer, which will be held July 29th at 6:30pm at the Holiday Inn. The student professional mixer will be a great way to network especially with professionals in the field of the student's interest! If you are a student and interested in volunteering during the conference, please email Sarah Willard-Eroh, at s.m.willarderoh@gmail.com or Jill Wilson Bull at jwilso88@utk.edu

The University of Tennessee Student Chapter is honored and excited about hosting the annual conference this year and look forward to meeting students from around the world! We look forward to seeing you in Knoxville!

For more information, check out the student page for the conference: http://fwf.ag.utk.edu/WDA2013/student-info.html.



The WDA 'Free Access' Program for Developing Nations

David A. Jessup, WDA Executive Manger

<u>Background</u>: About 8 years ago, with the financial assistance of Wildlife Conservation Society, WDA began providing free access to Journal of Wildlife Diseases (JWD) content for colleagues in the world's 134 least economically developed nations. In 2009 several

nations in Latin America were added to the list, bringing the total up to 140 nations eligible for free access based on the users IP address.

<u>Current Information:</u> WDA has recently reviewed the online usage of JWD in eligible developing countries as well as developed countries. We found that:

- 1) The use of abstracts, html files, and pdfs in developed and developing nations has increased yearly from 2009-2012. Approximately 20-25% of JWD content downloads originated in the developing world during this period of time.
- 2) Online use of JWD content in the developing world increased steadily from 2009-2012
- 3) From 2009-2012, the online downloading of pdfs in the developing world increased from the equivalent of about 150 individual members downloading all the papers printed in one year, to the equivalent of about 300 members downloading all the papers printed in one year.
- 4) It is clear that at least a few colleagues in most of the eligible nations are downloading and using JWD content. The proportion of eligible nations downloading content increased from 75% in 2009 to 95% in 2012.
- 5) Colleagues in some nations downloaded a LOT of content. Colleagues in China, by about an order of magnitude, were the largest users of JWD free access content online from 2009-2012, with fairly regular levels of usage also seen in Argentina, Brazil, Egypt, India, Indonesia, Iran, Mexico, Philippines, Pakistan and Thailand.

<u>Conclusions:</u> The WDA free access program is providing a major source of wildlife health/disease content in the developing world. Its use is increasing year to year. Although the majority of JWD electronic content use still comes from the developed nations, a significant proportion of users are in the developing nations.



First Biennial Meeting of the WDA Latin American Section! September 19-22, Sao Paulo, Brazil

We are pleased to invite you to the First Biennial Meeting of the Latin American WDA, from 19 to 22 September 2013, in Sao Paulo, Brazil.

Our host will be the School of Veterinary Medicine and Animal Sciences of the University of São Paulo, in São Paulo, Brazil. The conference program will include

expert keynote speakers directly involved in wildlife health research and initiatives in Latin America and beyond, Márcia Chame dos Santos Fundação Oswaldo Cruz, Brazil; Thierry Work, USGS and Vice President of the WDA; and Marcela Uhart, University of California, Davis and Chair of the Latin American Section of the WDA. Additional speakers have been invited and will be announced when they confirm their participation.

We are certain this will be a great and diverse conference! We have received 98 abstracts, 37 for oral presentations, and 61 for posters. These include 68 abstracts from Brazil; 6 from each Chile and México; 4 each from Peru, Argentina and Costa Rica; 3 from Bolivia; 2 from Colombia; and 1 from Spain.

Conference languages will be Spanish, Portuguese and English, with no translation offered. Dr. Eliana Reiko Matushima, LA WDA Section Secretary is the head of the Organizing Committee. Dr. José Luiz Catão-Dias, Co-Chair of the LA WDA Section is Chair of the Scientific Committee. Further information may be obtained via the conference website: http://www.wdaamericalatina.com.br/

Please register for the conference before July 31st for a discounted registration fee. Online registration will be open until September 1st, at an increased rate. Keep in mind that WDA members benefit from lower registration fees, and will also enjoy all the additional benefits of being a WDA member, such as access to the Journal of Wildlife Diseases, lower page charges for publication, access to an extensive wildlife health professional network, and many more!

As part of the activities of our first meeting, we are organizing a photo contest. Anyone attending the conference can submit photographs, and we particularly encourage students to participate! There will be three categories: Fauna (captive or free-ranging), Landscape/flora, and People/culture. For a fixed fee of R\$10 (approx. U\$5), each participant can submit a maximum of 3 photographs, which can be in the same or in different categories. Photographs will be displayed throughout the meeting and will be judged by the public and by an anonymous jury. Winners will be announced at the end of the meeting. We look forward to seeing your photos... for more instructions and details, please visit www.wdaamericalatina.com.br

The student chapter of the LA WDA is compiling a list of available lodging (full price range) near the conference venue, as well as detailed instructions for transportation to and from the University and to each hotel/hostel from the Sao Paulo International airports (Guarulhos and Congonhas). We are doing our best to keep conference costs low, so that a greater number of people from the region can participate. In addition, the student chapter of the LA WDA will be happy to assist students who are traveling on a tight budget and are willing to share a room with fellow students. Please contact Francesca Schiaffino and Ralph Vanstreels at estudianteswdala@gmail.com

We are certain that this first LA WDA meeting will be an historic event for all those working with wildlife health in Latin America, and we look forward to seeing you soon in São Paulo! If you have any questions about the conference, please contact the Conference Organizers at reuniaowdalatinamerica2013@gmail.com

Nordic Section

The Nordic Section recently held a successful biennial meeting on Torsö island, Sweden. The proceedings, with short abstracts and some photos, will soon be posted on the NWDA section webpage: http://www.wildlifedisease.org/wda/SECTIONS/Nordic.aspx

Australasian Section Annual Conference Coming Up!

The Grampians, Victoria, Australia, 29th September – 4th October 2013. The annual conference of the Wildlife Disease Association Australasian section will be held at the Grampians Retreat, near the Grampians National Park in western Victoria (south-eastern Australia), from 29th September until 4th October. Delegates can meet at an evening meal



Sunday 29th September and participate in some spot-light viewing of native wildlife that night if weather permits.

In conjunction with the Innovative Research Universities Group, a symposium and workshop in Biodiversity and Disease Ecology will be held at the same venue on Friday 4/10/13 and Saturday 5/10/2013. The symposium held on the last day of the conference will provide background information on the diseases currently threatening biodiversity in Australasia including newly arrived exotic pathogens such as chytridiomycosis and emerging endemic pathogens (including the transmissible cancer Tasmanian devil facial tumour disease - DFTD). The workshop aims to help address the significant and under-appreciated threat of disease to the conservation of Australasian biodiversity. It will consist of four sessions that will identify actions to be undertaken in the following areas: policy, research, teaching and collaboration. All are welcome to attend the workshop; registration for the workshop is separate to the conference, but can also be booked on the conference registration form. There are additional costs to attend the workshop, including accommodation and dinner on Friday night, as well as breakfast, lunch and morning and afternoon tea on Saturday. Please see registration form for more detail.

The Grampians National Park contains four spectacular sandstone ranges, as well as some smaller granitic hills and outcrops; its highest peaks reach approximately 1,000 meters above sea level. It is home to over 200 bird species, 35 mammal species, 28 reptile species and 6 native fish species and 11 frog species. The conference will be during the wonderful wild flower season (there are almost 1000 native plant species in the park). Indigenous Australians have lived in the area for approximately 5,000 years, and there is a great indigenous cultural centre (Brambuk) near Halls Gap, as well as the opportunity to see rock art at a number of locations within the park. Delegates will have the opportunity to explore some of the beautiful hikes in the area (ranging from easy and family and friendly to difficult), go on an indigenous rock art tour or explore their inner Bear Grylls by joining a beginner's rock climbing course.

Temperatures in the Grampians are likely to be around 16°-20°C during the day and 6°-8°C at night. While it is not a high rainfall area, spring is towards the end of the main rainfall period, so make sure to bring along a rain coat just in case. The Grampians National Park can be accessed by car (approximately 3 hours) or public transport (approximately 4.5 hours) from Melbourne. We will try to organise car-pooling closer to the time as well.

The deadline for submission of abstracts is 1st August, and registrations are due by 1st September. Please download an info sheet, registration form and abstract submission form from http://www.wida-aust.org/conf.htm or http://www.wildlifedisease.org/wda/CONFERENCES/AustralasianConference.aspx For any questions, please contact Jasmin Hufschmid huj@unimelb.edu.au

We would love to see you in the beautiful Grampians!!



USGS Quarterly Report

January 2013 - March 2013

Written and compiled by the U.S. Geological Survey National Wildlife Health Center Field Investigations Team members: Anne Ballmann, LeAnn White, Barb Bodenstein, and Jennifer Buckner.

Continued investigation of Newcastle Disease Virus in Cormorants in the Midwest

Newcastle Disease (ND) is a reportable disease in poultry and was last detected in U.S. poultry flocks in California in 2003. However, ND continues to cause mortality events in wild birds, particularly double-crested cormorants (*Phalacrocoraxauritus*) (DCCO). The frequency of DCCO mortality events caused by Newcastle Disease virus (NDV) appears to be increasing in the Midwest with almost annual occurrence of NDV-associated mortality in DCCO in the Midwest since 2006 compared to the 11 year period between the first documented events in 1992 and second detection in 2003. Due to the apparent increase in frequency of NDV mortality events, scientists at the National Wildlife Health Center (NWHC) began a collaborative study to investigate the transmission dynamics of NDV in DCCO in 2012. Partners included in this project include the U.S. Department of Agriculture-Wildlife Services, Minnesota Department of Natural Resources, U.S. Fish and Wildlife Service, and the Leech Lake Band of Ojibwa.

The study is focused primarily on determining the role of maternal antibodies in transmission of NDV. During 2012 over 1,000 adult and juvenile DCCO at several breeding colonies in Minnesota and Wisconsin were sampled for NDV. A NDV epizootic occurred on one of the study sites in 2012 giving scientists the opportunity to compare serology and virus isolation results at NDV outbreak and non-outbreak sites within the same year. Scientists on the project also assisted in the MN DNR's 2012 effort to control spread of this disease by performing carcass collection and incineration at several of the NDV outbreak sites in MN. During 2013 scientists will be focusing on DCCO breeding colonies in Minnesota where they again plan to collect over 1,000 samples from DCCO of various age classes. Understanding the role of maternal antibodies in the transmission dynamics of ND may help scientists predict future epizootic events in DCCO and develop disease management strategies. Contact: LeAnn White, National Wildlife Health Center, 608-270-2491, <a href="mailto:clustification-color: clustification-color: clustification-colo

Investigation of snake fungal disease east of the Mississippi River (United States)

Since 2006, there has been an increase in the number of reports of skin infections in wild snakes in certain parts of the eastern United States. Laboratory testing has implicated a fungal pathogen, *Ophidiomyces ophiodiicola* (formerly *Chrysosporium ophiodiicola*), but the causative agent has not yet been definitively identified. NWHC scientists are collaborating with the US Fish and Wildlife Service, numerous state agencies, organizations, researchers, and other key stakeholders to investigate this potentially emerging disease and to learn more about its impacts on snake populations. For more information, visit http://www.nwhc.usgs.gov/disease_information/other_diseases/snake_fungal_disease.jsp. Contact: Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

Suspected famphur poisoning in Raptors (Washington)

One red-tailed hawk (*Buteo jamaicensis*), one great horned owl (*Bubo virginianus*), and eight European starlings (*Sturnus vulgaris*) were submitted to NWHC for necropsy after the Washington Department of Fish and Wildlife received reports of >100 moribund and dead starlings and magpies in a backyard residence in eastern Washington. The red-tailed hawks and great horned owl were observed feeding on the carcasses of starlings and magpie between late-January and mid-March, 2013. Other species including house sparrows (*Passer domesticus*), rock doves (*Columba livia*), and waterfowl were abundant in the area and were not affected. One red-tailed hawk was taken to a wildlife rehabilitator and recovered after receiving atropine. Black feathers and one starling leg were recovered from the stomach of the red-tailed hawk and no signs of infectious disease were present at necropsy. Brain cholinesterase activity in the red-tailed hawk, great horned owl and starlings were markedly depressed, indicating they were recently exposed to organophosphate/carbamate pesticide compounds. No toxic organic compounds could be identified in liver tissue of the starlings or red-tailed hawk by mass spectrometry and there were no stomach contents available from the starlings for analysis. Famphur, a regulated pesticide that is highly toxic to birds was identified in the skintissue of the feet of one starling by mass spectrometry. **Contact:** Barbara Bodenstein, National Wildlife Health Center, 608-270-2447, bbodenstein@usgs.gov

Eastern Brown Pelican mortality in Brevard County (Florida)

Mortality among juvenile and adult eastern brown pelicans (*Pelicanus occidentalis*) concentrated around Merritt Island and Melbourne, Florida began in late February and continued through mid-April 2013, eventually involving approximately 250 pelicans. Concurrent mortality involving other avian, mammalian, and fish species was reported sporadically over the course of this event. Initially, clinical signs in pelicans were suggestive of avian botulism; however, lab tests were negative. All examined birds were emaciated with moderate to marked intestinal parasitism. Birds tested negative for lead exposure and no significant bacteria were cultured. Moderate amounts of metabolites of a chlorinated hydrocarbon insecticide (organochlorines) and several PCB (polychlorinated biphenyls) congeners were detected in at least one pelican but these compounds likely accumulated from the diet and were not the primary cause of death. Avian poxvirus was isolated from skin lesions in another pelican that also had microscopic evidence suggestive of systemic poxvirus infection. Similar lesions were not present in other pelicans examined; therefore, its significance to this mortality event is uncertain. At least eight mortality events involving brown pelicans have been reported in Brevard County since the 1980s; causes of death have been attributed to botulism type C and other suspected toxins, trauma, and undetermined causes. **Contact:** Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

Manatee mortality on the western coast of Florida

Toxic red tide caused by *Karenina brevis* is estimated to have killed 267 West Indian manatee (*Trichechus manatus* ssp. Latirostris), a Florida subspecies, along the western coast of Florida between January and April 2013. These deaths were investigated by the Marine Mammal Pathobiology Laboratory (Florida Fish & Wildlife Conservation Commission). The majority of affected manatee were detected in Lee County although the bloom stretched from Sarasota to Collier Counties. The red tide toxins cause respiratory distress, paralysis, and

unresponsiveness in manatee that may become exposed through inhalation of aerosolized toxicanton the water's surface or ingestion of contaminated sea grass. Blooms of red tide typically occur annually in the region but the toxins may remain off-shore depending on the prevailing winds and water currents. This year is on track to be one of the worst for manatee mortality; 633animals have already been reported dead (as of 6/7/13) which exceeds totals from the previous two years. Other common causes of manatee mortality include watercraft collisions, cold stress, perinatal mortality, and other natural or undetermined causes. The Florida manatee is endangered; only about 5000 are thought to remain in the wild. **Contact:** Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

White-nose syndrome Winter 2012/2013 summary

White-nose syndrome (WNS) was confirmed in cave-hibernating bats in three new states (South Carolina, Georgia, and Illinois) and one new province (Prince Edward Island) during the 2012/2013winter season, as previously reported in the mid-winter update. This represents a continued expansion of Geomyces destructans distribution on the landscape and thus far evidence of geographic barriers preventing its spread is lacking. White-nose syndrome is now confirmed in 22 states and 5Canadian provinces since it was first recognized near Albany, New York in 2007. Numerous additional counties throughout Tennessee, Kentucky, and Ohio had confirmed cases of WNS this winter indicating that the disease is now endemic in these states within two years of its initial detection in those areas. Sites in several northeastern states where WNS has been present the longest continue to be occupied by bats although in much lower numbers. Other states report a surge in total winter bat counts at some sites either concurrent with the first year of detection of WNS or in the preceding winter. It is unclear if this surge represents immigrants from other sites and/or a shift in roosting location of the local bat population from unsurveyed portions of the hibernaculum. Winter hibernacula survey data are being reviewed by state and federal management agencies to better understand the on-going impacts of WNS on bat populations in affected regions. Also of note, G. destructans DNA has been detected on endangered Virginia big-eared bats (Corynorhinus townsendii virginianus) hibernating in at least one known contaminated site; no mortality or visible signs of disease are reported in this species at this time.

For the latest WNS updates, consult NWHC Wildlife Health Bulletins at: http://www.nwhc.usgs.gov/publications/wildlife_health_bulletins/index.jsp. Current NWHC bat submission guidelines are available at: http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/USGS_NWHC_Bat_WNS_submission_protocol.pdf. Contact: Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov



Help WDA Now And Later!

The fundraising effort to establish an endowment for the Journal is moving along, but we still have quite a way to go! Our ultimate goal is to assure the long-term future of the journal, making it accessible for all, and keeping WDA dues at an affordable level.

You can help WDA **now** by transferring funds from your IRA/401(K), or donating stocks, bonds and mutual funds. You can help the WDA **later** by making the Association a beneficiary in your will. We already have one loyal WDA member who has done so (and we still wish him a long and healthy life).

If you live in the U.S. and have an Individual Retirement Account (IRA) or a 401(K) savings account <u>and</u> are at least 701/2 years old, please consider making a contribution of any amount by directly transferring money from your account to the WDA. This benefits the association, and you avoid paying taxes on these funds. If you pay taxes in the U.S., your contribution of stock, bonds, mutual funds or cash is tax deductible this calendar year

since the WDA is a scientific and educational nonprofit organization registered with the U.S. Internal Revenue Service (IRS). The WDA's tax ID number is 366098737 for tax preparation or to list in your will. Please let our treasurer, Dr. Laurie Baeten (wdatreasurer@gmail.com) or Executive Manager, Dave Jessup (wda.manager@gmail.com), know if you have stocks to donate or are including the Association in your will.