

Newsletter



APRIL 2013

SAMANTHA GIBBS, EDITOR

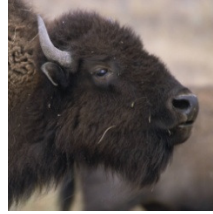
Top stories



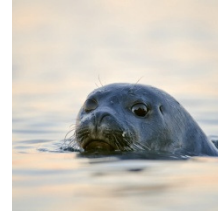
Upcoming WDA Meetings



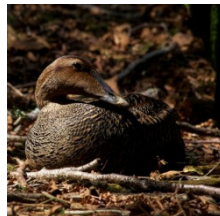
Opportunities



Call to Action



Flipper Abscesses



USGS Quarterly Report



Thank you JWD Endowment fund donors!

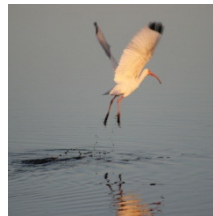


Photo contest update

Upcoming WDA Meetings



See <http://www.wildlifedisease.org/wda/CONFERENCES.aspx> for details on all WDA meetings.

International WDA: 62nd annual conference will be held July 28-August 2nd at the Holiday Inn-Worlds Fair Park in Knoxville, TN, USA. Conference registration is now open and a call for abstracts is in effect until April 1, 2013.

Australasian WDA: Grampians, Victoria, Australia, September 30-October 4, 2013.

Nordic WDA: Torsö, Lake Vänern, Sweden May 29-June 1, 2013.

European WDA: Will not be meeting formally in 2013 but may meet informally in conjunction with a European Union wildlife disease and population monitoring grant meeting (<http://aphaea.eu/>) in Brescia, Italy, in late June 2013. The next formal meeting of EWDA will be in Scotland in 2014.

Wildlife Veterinary Section: Will meet at the WDA 62nd annual conference July 28-August 2, 2013 in Knoxville, TN.

Latin American WDA: First time meeting in Sao Paulo, Brazil, September 19-22, 2013. Many of you might remember the memorable 2010 WDA International Conference in Puerto Iguazú, Argentina, where more than 100 Latin American wildlife health students

and professionals joined WDA colleagues from around the world. At that meeting, the first steps for the creation of the WDA Latin American Section emerged and, one year later, it was approved by Council and formally established.

Since then, several steps have been taken to strengthen the newest section of the WDA, and now the moment has come to fulfill one more step towards solidifying its regional leadership: our first biennial meeting!

The event will take place at the Faculty of Veterinary Medicine 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 open sessions for posters and oral presentations. Conference languages will be Spanish, Portuguese and English, with no translation offered. Dr. Eliana Reiko Matushima is the head of the Organizing Committee. Abstract submission will begin April 15th until May 31st, and further information may be obtained via the conference website: <http://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 Guarulhos airport. We are doing our best to keep conference costs low, so that a greater number of people from the region can participate.

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 Ralph Van Streels at ralphvanstreels@gmail.com

Opportunities



Photo: Samantha Gibbs

Kick-off: WDA Small Grants Program

Carol Meteyer, Ian Barker, Ezequiel Hidalgo, Julie Langenberg, and Lisa Yon - WDA Small Grants Committee

The WDA Council has inaugurated a new WDA Small Grants Program, providing opportunities for members of the WDA to further its Mission "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".

The amount of funding available for small grants will be determined each year based on the productivity of WDA investments and WDA Council priorities. We anticipate that the first call for proposals will be in May or early June 2013. The submission deadline will be January 15, 2014 and successful grants will be awarded in May 2014.

The WDA Small Grants Program will be competitive, with criteria for selection established by the WDA Small Grants Committee. Projects will be completed in one year; will have defined and measurable goals; will not involve research, laboratory, or field studies; will have a project leader who is a WDA member, and will support the Mission of the WDA.

Proposals that might fit the criteria for Small Grants awards would include projects that develop, archive and make available wildlife teaching materials; compilations of on-line sources of scientific information for member use; financial support for Section meetings or general membership symposia; curation of valuable collections of wildlife disease resources; WDA capacity-building or creative outreach that enhances membership numbers and benefit, and translation of wildlife health info to reach out to under-represented countries. These are just examples and we look forward to the creative

ways that our membership can find to further the mission of the WDA.

Details outlining submission guidelines, approximate funding available for this grant cycle, and funding criteria will be made available through blast member email, information at the 2013 WDA Business Meeting in Knoxville, TN, and in subsequent WDA Newsletters. We are excited about this new opportunity for WDA members and anticipate this first year of the program will include many good proposals that will promote the WDA and its Mission.

Request for research proposals (RFP)

Zoetis-Morris Animal Foundation

Veterinary fellowship for advanced study

Deadline: May 28, 2013, 11:59 p.m. EST

Wildlife/Exotics

<http://www.morrisanimalfoundation.org/researchers/wildlife-exotics>

The Oiled Wildlife-Care Network (OWCN) is currently seeking research proposals from wildlife professionals interested in improving oiled wildlife spill response and better understanding of the effects of oil on wildlife.

Deadlines: Pre-Proposals 5:00 pm (PST) 3 May 2013

Small Grant Proposals 5:00 pm (PST) 26 July 2013

www.owcn.org

Wildlife Veterinarian, Southeastern Cooperative Wildlife Disease Study

This position is in the Public Service track at UGA and is responsible for providing leadership, supervision, and training to both laboratory and field staff conducting SCWDS diagnostics, surveillance, and research activities related to wildlife diseases. Interested persons should send a curriculum vitae, a letter summarizing accomplishments and professional goals, and have three letters of reference forwarded directly to Dr. John R. Fischer, Director, Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, The University of Georgia, Athens, Georgia 30602-7387.

Deadline: May 15, 2013

<http://www.vet.uga.edu/scwds/>

Call to action

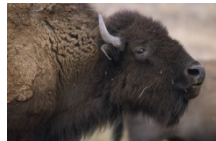


Photo: Steve Hillebrand FWS

As the Wildlife Disease Association has become more international it has tended to avoid taking official positions on political and biological questions that may be regional and which may be handled quite differently in different parts of the world (like wildlife ownership in Europe vs Africa vs North America).

With a membership that spans a wide variety of professional specializations WDA has also tended to avoid taking positions that effect one specialty area (say parasitologists or veterinarians only). However, WDA recognizes some members have strong feelings about such issues and may want to take action or at least be aware of how to weigh in to help. Toward this end we are providing selected short summaries of "Calls for Action" that members of WDA and constituent groups bring to our attention. Two such summaries follow, both provided by Paul Calle of Wildlife Conservation Society and the current President of American Association of Zoo Veterinarians

Bison as the US National Mammal

Bison—our largest land mammal—have unparalleled historical, cultural, economic and ecological significance to the U.S. The Vote Bison campaign seeks to designate the American bison as the National Mammal of the United States by building a geographically diverse coalition of Native American, bison production, conservation, zoological, sportsmen/recreation, business, education, and health organizations. The coalition currently has 34 members, including the Association of Zoos and Aquariums, the Bronx Zoo chapter of the American Association of Zoo Keepers and 7 zoological

institutions and will work to reintroduce the National Bison Legacy Act in 2013.

Reform of US DEA Policy: Support for the Veterinary Medicine Mobility Act of 2013

A number of organizations are urging Congress to pass the Veterinary Medicine Mobility Act of 2013, which is being championed by U.S. Representative Kurt Schrader (D-OR-5). The legislation amends the Controlled Substances Act (CSA) to allow veterinarians to transport, administer and dispense controlled substances outside of their registered locations (office or clinic). The practice of veterinary medicine is unique in that veterinarians treat multiple species of animals in a wide variety of settings. To adequately practice medicine, veterinarians are often required to provide mobile or ambulatory services in the field. This is particularly important in rural areas and for the care of large animals. Many companion animal veterinarians provide "house call" services or operate mobile spay and neuter veterinary clinics. Wildlife veterinarians may need to use controlled substances to remove or translocate dangerous wildlife (e.g. bears, cougars); rescue trapped wildlife (e.g. deer trapped in a fence); or in research and disease control efforts in remote areas and across whole States or regions.

The Drug Enforcement Administration's (DEA) interpretation of provisions within the Controlled Substances Act make it illegal for veterinarians to transport controlled substances for use away from their registered locations. The Veterinary Medicine Mobility Act will ensure that veterinarians are able to provide proper care for their patients. The ability to be mobile is imperative for veterinarians to meet the health and welfare needs of the animals that they treat as well as to safeguard public safety and the nation's food supply. Lead or contact organizations on this issue include AVMA, AAZV and AAWV.

Flipper abscesses

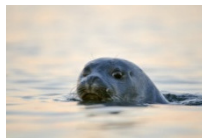


Photo: Henrik Karlsson

Rear flipper abscesses in Danish Harbour Seals

Mette Sif Hansen, Elisabeth Holm, Gitte Larsen, Trine Hammer Jensen and Mariann Chriél from The National Veterinary Institute, Technical University of Denmark.

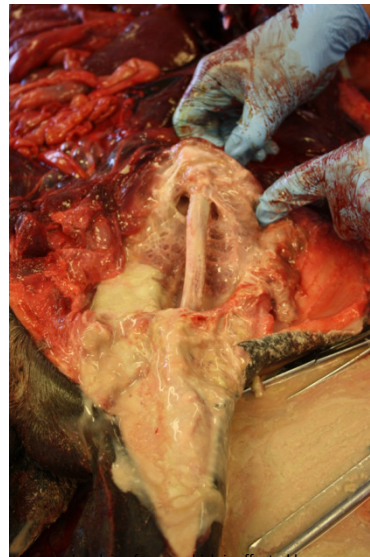
At the west coast of Jutland, Denmark 4 Harbour Seals (*Phoca vitulina*) (2 males, 2 females) were euthanized due to reduced

welfare and enfeeblement, during autumn 2011 and 2012.

The seals were necropsied at the Danish National Veterinary Institute, which carries out necropsies of seals and Harbour Porpoises as part of the wildlife health surveillance, required by the Danish contingency plan for marine mammals.

The seals were emaciated and had little or no contents in stomach and intestines. All animals had a swollen rear flipper and the swelling extended into the abdominal wall. Cutting into the affected tissue revealed cellulitis and large abscesses in the flippers. Pus surrounded the bones (femur, tibia/fibula and/or carpal bones), which were affected by necrosis and bone resorption.

Furthermore, there was atrophy of tendons and muscles in the affected area. In the overlaying skin there were no wounds or lesions. Bacterial cultivation of the pus showed presence of *Aeromonas hydrophila* or *Serratia grimesii*, or the samples were sterile. The results of the bacterial cultivations were unspecific in regard to unraveling the etiology. Furthermore, 3 of the seals had massive amounts of lung worms.



Abscess involving femur, which is affected by bone resorption.

The bone necrosis, and atrophy of tendons and muscles have had a negative impact on the mobility of the seals, resulting in a reduced ability to hunt for prey and finally leading to emaciation and weakening. The large number of lung worms might also reflect the reduced health status of the seals.

We have not been able to find the exact mechanism causing these rear flipper abscesses. They might be caused by bite wounds, however, we did not find any wounds or lesions in the overlaying skin, and furthermore, bite wound associated lesions would be expected to be seen mainly among males.

USGS quarterly report



July 2012 to September 2012

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

Photo: Randall Mickley USDA-APHIS-WS

Common Eider mortality attributed to Wellfleet Bay virus continues (Massachusetts)

Morbidity and mortality among common eiders located on the bayside of the Cape Cod peninsula was first reported in the late 1990s and has occurred almost annually since 2006; often in both the spring and fall. A novel virus, recently identified within the family Orthomyxoviridae and dubbed "Wellfleet Bay virus" (WFBV) based on the predominance of dead birds at this location, was first detected in 2006. In the past, numbers affected have ranged from less than 20 to several thousand eiders per year. On-going surveillance by partners in 2012 identified a single fall mortality event beginning in early October and lasting through mid-November that involved an estimated 185 eiders. Clinical signs included weakness, thin body condition, and fecal staining around the vent. Several thousand apparently unaffected common eiders and black scoters were observed offshore. Although WFBV was not isolated from this year's die-off, lesions consistent with this viral infection as demonstrated in infection trials conducted at NWHC were present. Additional study in collaboration with Southeastern Cooperative Wildlife Disease Study and U.S. Fish and Wildlife Service has identified several possible routes of viral transmission among eiders. The overall impact of WFBV infection on the Common eider population is not known. Contacts: Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

Trematodiasis in the Mississippi Flyway

Trematodiasis caused by the exotic trematodes *Sphaeridiotremaglobulus*, *Cyathocotylebushiensis*, and *Leyogonimuspolyoon* was associated with >6,300 avian mortalities in the Mississippi Flyway in 2012. Trematodiasis associated mortality in the Mississippi Flyway was much lower than in 2011 when mortality was estimated to be over 15,000 dead birds. Nevertheless, the 2012 trematodiasis mortality estimates were still almost twice as high as the next leading cause of mortality, botulism type E, which was associated with ~3,700 avian deaths in the Mississippi Flyway in 2012. These mortality estimates may be somewhat influenced by the fact that trematodiasis is one of the few diseases for which weekly long-term monitoring by biologists at the Upper Mississippi National Wildlife Refuge have been conducted. Carcasses tested at USGS-National Wildlife Health Center have been positive for trematodiasis every spring and fall on the Upper Mississippi National Wildlife Refuge (UMNWR) since its discovery there in 2002.

Total cumulative mortality on the UMNWR attributed to trematodiasis for the last ten years (2002-2012) is approximately 87,500 birds. American coot and lesser scaup make up about 95% of the total mortality associated with trematodiasis even though they account for

only a quarter of the birds migrating on the Upper Mississippi River. Although there have been declines in the lesser scaup since the 1980s with a record low in 2005, the 2012 population estimate for lesser scaup was around 5.2 million birds which was 21% higher than in 2011. Whether this disease is affecting fluctuations in lesser scaup populations is currently unknown. Contact: LeAnn White, National Wildlife Health Center, 608-270-2491, clwhite@usgs.gov

White-nose syndrome mid-winter update 2012/2013

White-nose syndrome (WNS) in cave-hibernating bats has recently been confirmed in several counties in Illinois, Georgia, and South Carolina, and on Prince Edward Island (Canada) during winter 2012/2013 bringing the total number of affected states and Canadian provinces to 22 and 5, respectively. Expansion of WNS now extends west of the Mississippi River to Crawford County, Missouri, and south to Jackson County, Alabama, more than 800 miles (1,300 km) from the presumed index site in Schoharie County, New York. The disease continues to spread into new counties within WNS-endemic states and provinces. Several of these range expansions have been associated with bat mortality or significant decreases in winter bat population counts, while others report only visible manifestation of fungal growth on a small percentage of hibernating bats. An analysis completed by USFWS biologists and collaborators estimates that since 2006, over 5 million bats have died from WNS. Endangered gray bats (*Myotis grisescens*) were added last winter season to the list of cave bat species susceptible to WNS, which includes little brown, northern long-eared, tri-colored, Indiana (endangered), eastern small-footed, and big brown bats. For the latest WNS updates, consult NWHC Wildlife Health Bulletins: http://www.nwhc.usgs.gov/publications/wildlife_health_bulletins/index.jsp. Current bat submission guidelines to NWHC are available at: http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/USGS_NWHC_Bat_WNS_submission_protocol.pdf Contacts: Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

Kittlitz's Murrelet nestling mortalities on Kodiak Island (Alaska)

Several apparently healthy Kittlitz's murrelet nestlings on Kodiak Island, Alaska, died suddenly with no apparent cause as determined by field biologists working on a nesting ecology project in 2011 and 2012. Most nestlings were being monitored by remote cameras that indicated nestlings were being fed regularly by adults and died during mild weather conditions. This unexplained mortality accounted for 21% of the overall mortality in 2011. Historically, the majority of chick mortality is attributed to predation and nest abandonment. Nine nestlings (2011=6; 2012=3) were collected and sent to NWHC for diagnostic evaluation. Laboratory tests revealed high levels of saxitoxin in crop content and/or liver in 87% of nestlings, and it was determined that exposure to saxitoxin was likely the cause of death. Camera data indicated that nestlings died shortly after consuming sand lance, which is the fish species commonly associated with the biomagnification of saxitoxin. An individual pigeon guillemot nestling from Protection Island and an adult marbled murrelet from San Juan Island, Washington, were negative for exposure. Wild bird deaths due to saxitoxin exposure have rarely been documented; mortality has been reported in piscivorous birds such as common murre and loons in Washington State, and cormorants, fulmars and gulls in northeastern England. NWHC is interested in receiving reports and specimens from any mortalities involving seabird species to continue to investigate saxitoxins as well as other biotoxins (domoic acid, brevetoxins, etc.) as potential causes of death. Contact: Barbara Bodenstein, National Wildlife Health Center, 608-270-2447, bbodenstein@usgs.gov

Monitoring avian botulism at Great Lakes beaches

Avian botulism is caused by a toxin produced by the bacterium *Clostridium botulinum*, which is widespread in soil. *C. botulinum* is usually dormant, but can germinate in aquatic environments during warm temperatures where there is anoxia (caused by conditions such as decomposing *Cladophora* algae or other vegetation) and available protein sources (e.g., the remains of small animals such as insects and invertebrates). Botulism is one of the most significant causes of wild bird mortality worldwide and avian botulism type E has caused large-scale bird deaths in the Great Lakes since the 1960s.

Scientists from the USGS and the National Park Service (NPS) are collaborating to explore the ecological pathways through which botulism toxin is transported to birds by collecting environmental data and tracking type E botulism related wildlife deaths. Key components of this project are the NPS-Sleeping Bear Dunes and USGS-National Wildlife Health Center AMBLE (Avian Monitoring for Botulism Lakeshore Events) volunteer beach monitors, who assist in recording timing, numbers, and species of bird carcasses deposited on beaches. In 2012, additional USGS beach monitors were hired and have provided support to the project through increased frequency of monitoring (e.g., daily) at more Great Lakes beach locations throughout the field season.

Botulism type E was confirmed in multiple species submitted to the NWHC for testing during both high and low mortality years, demonstrating that low-level avian botulism type E mortality can occur in the absence of large die-off events. Common loons, long-tailed ducks, horned grebes, double-crested cormorants, and ring-billed gulls were the most frequently found carcasses. Approximately 60% of the bird carcasses tested by the NWHC have returned positive results, indicating that botulism type E is the main driver for these mortality events. This information will help wildlife managers understand the environmental conditions and disease pathways that result in the deaths of birds and other wildlife. This study is funded by the Great Lakes Restoration Initiative. More information about AMBLE can be found

at <http://www.nwhc.usgs.gov/AMBLE/Contact>: Jennifer Chipault, National Wildlife Health Center, 608-270-2473, AMBLE@usgs.gov; ZacNajacht, National Wildlife Health Center, 608-270-2400 ext. 2394, znajacht@usgs.gov

2012 West Nile Virus Update

West Nile Virus (WNV) was detected in 48 states and there were nearly 5,400 human cases (the second highest since first detected in 1999) according to the Centers for Disease Control. In addition to increased prevalence this past year, there was also an increase in the severity of neuro-invasive cases compared to the recent past. NWHC diagnosed WNV (concurrent with botulism type C) in American white pelicans in Minnesota, Medicine Lake NWR in Montana and Chase Lake NWR in North Dakota; mixed species of shorebirds on the Missouri River in South Dakota and Nebraska; a bald eagle in Wisconsin; and crows and red-tailed hawks from Massachusetts. NWHC plans to compare 2012 WNV isolates with archived isolates (from previous years) for genetic differences that may explain changes in virulence. Contact: LeAnn White, National Wildlife Health Center, 608-270-2491, clwhite@usgs.gov or Anne Ballmann, National Wildlife Health Center, 608-270-2445, aballmann@usgs.gov

Coral disease outbreak on North Kauai (Hawaii)

In November 2012, the NWHC Honolulu Field Station (HFS) investigated an unusual mortality of corals on North Kauai. Cyanobacteria were incriminated as the most likely culprit, and this was the first time this disease has been documented in epidemic proportions in Hawaii. NWHC distributed a Wildlife Health Bulletin about this outbreak that can be viewed at:

http://www.nwhc.usgs.gov/publications/wildlife_health_bulletins/WHB_2012-06_Coral_Disease.pdf

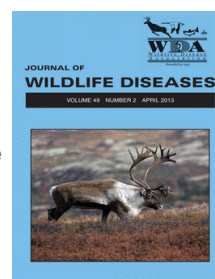
For more information see the USGS Top Story, Coral Disease Outbreak in Hawaii. Contact: Thierry Work, 808-792-9520, National Wildlife Health Center HFS, thierry_work@usgs.gov

For the full NWHC quarterly mortality report, please see

http://www.nwhc.usgs.gov/publications/quarterly_reports/index.jsp

Thank you JWD Endowment Fund donors!

It has been a year since we launched our effort to endow the production of Journal of Wildlife Diseases (JWD) and its worldwide distribution by 2020. In the October WDA Newsletter we listed those



members who had made donations to the JWD Endowment fund up to that time. Since then nearly 50 more donations have been made by WDA members and we wish to thank and acknowledge them individually (see list to follow). For several this was a second donation for the year. We also again thank those who gave during the April 2012-October 2012 period. A comprehensive list of member/donors to the JWD Endowment from April 2012-April 2013 is being compiled and will be posted on the WDA website. WDA deeply appreciates the generosity of its membership and your commitment to this paramount goal. Any members wishing to donate in 2013 can most easily do so at the WDA website: <http://www.wildlifedisease.org/wda/ProductDetail.aspx?ProductId=107106> or by sending a check to Laurie Baeten, 129 N. Frey Ave., Fort Collins, CO 80521 with a notation that is for the JWD Endowment.

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Update on WDA photo contest and request for volunteers

The **Student Activities Committee** (SAC) will be holding a photo contest at the upcoming WDA conference in Knoxville. Enter the contest for the chance to **win a Pseudart rifle** and many other prizes.

Details on the contest can be found at the conference webpage:
<http://fwf.ag.utk.edu/WDA2013/photo-contest.html>

The SAC is seeking a handful of judges (those with a good eye for photography) to help out with this event. In addition, the SAC is calling for student volunteers to help out with the photo contest registration table, as well as the sales of t-shirts and other items. If you plan to attend the conference and you would like to volunteer for any of these activities, please contact the SAC chair, Lisa Shender (lashender@ucdavis.edu).

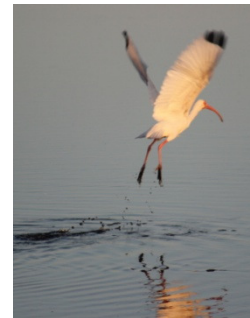


Photo: Samantha Gibbs