July 2015

News from the Nordic section

The Nordic section biennial meeting

The Nordic section of the WDA recently had its 22nd biennial meeting in the heart of the Dovre Mountains in Norway 10-12 June, 2015. In a slight re-interpretation of tradition, this year’s meeting was held within an ‘island of nature’ rather than on a true island. Dovre Mountains, or Dovrefjell, holds a special place in the hearts of Norwegians. These mountains form a barrier between southern and central Norway and are home to a wide variety of plant and animal life, including muskox (Ovibos muschatos) originally introduced from Greenland and some of Europe’s last wild reindeer herds (Rangifer tarandus tarandus). The Nordic section is 55 members strong and this year’s meeting had 20 participants representing all of the Nordic countries except Iceland.

As is tradition, the meeting was a friendly, familiar and multi-lingual affair that was packed with scientific presentations interspersed with social events and the general meeting. The social highlight was a muskox safari into the neighboring mountains to view these magnificent animals in the wild. Discussions continued long into the evenings in the ‘gillestuga’ or the cozy recreation room in the cellar of our lodgings. The Nordic section council was re-elected for another two-year term at the general meeting, and attracting new members across disciplines and increasing student involvement were highlighted as section priorities.

The scientific program began with a summary of recent wildlife health issues from each country in attendance.

In Norway, the cervid and muskox health program continued to be a core activity, with sampling, screening and disease investigation in these species. For example, outbreaks of pneumonia in muskoxen and digital necrobacillosis in wild reindeer were again detected...
in recent years. Avian health issues included *Salmonella typhimurium*, *Trichomonas gallinae* and avian pox in passerines. Since the emergence of *T. gallinae* in Fennoscandia in 2008, there has been a 20-30% population decline of greenfinches (*Carduelis chloris*) in Norway. Similar trends also have been seen in Finland and Sweden.

In Sweden, avian influenza received a lot of media attention following the emergence of H10N7 influenza in harbor seals (*Phoca vitulina*) in spring 2014 and the findings of highly pathogenic H5N8 in mute swans (*Cygnus olor*) from Stockholm that died from lead toxicity in early 2015. Other wildlife health issues included septicemic pasteurellosis in fallow deer (*Dama dama*), a large myxomatosis outbreak in feral rabbits (*Oryctolagus cunniculus*) in southern Sweden and continued outbreaks of *Trichomonas gallinae* primarily in greenfinches.

In Finland, targeted surveillance for African Swine Fever (ASF) was initiated following the recent incursion of ASF in northeastern Europe. To date, no virus or antibodies have been detected in wild boar (*Sus scrofa*). Similarly, no cases of *Echinococcus multilocularis* or rabies were detected in the Finnish wildlife surveillance program, whereas sylvatic Trichinella remained reasonably prevalent. Lead toxicity continued to be a common cause of mortality in white-tailed eagles (*Haliaeetus albicilla*).

In *Denmark*, also experienced a harbor seal mortality event associated with H10N7 avian influenza that began in the summer of 2014. The extensive canine distemper outbreak in Jutland that began in 2011 is still on-going in red foxes (*Vulpes vulpes*) and farmed American mink, and distemper cases have even been detected in invasive raccoon dogs (*Nyctereutes procyonoides*). Listeriosis was reported in a number of fallow deer.

Two student travel grants were awarded to Anabelle Jakobsen and Andrea Miller to attend the meeting and present their research on gastrointestinal disease in roe deer in Denmark and on focused sampling of *fox feces* for *Echinococcus multilocularis* surveillance, respectively. Other presentations included specific topics within raptor and cervid health, Sarcoptic mange in wolves (*Canis lupus*) and arctic foxes (*Alopex lagopus*), salmonellosis in hedgehogs (*Erinaceus europaeus*), an update on filarioid nematodes in Finland, a primer on dental health in wildlife, and the latest in biologging techniques. A brief summary of the scientific program will be available shortly on the WDA webpage.

Wildlife disease surveillance in Sweden in 2014

The National Veterinary Institute in Sweden has just released an English version of their annual report on wildlife disease monitoring for 2014. This report summarizes current programs and projects and highlights topical wildlife health issues. It can be found at the following link:


AUCTION DINNER – call for items

2015 WDA International Meeting Organizing Committee

The 64th Annual international Conference of the Wildlife Disease Association is now less than three weeks away! One of the social highlights of the annual conference is the auction dinner. The annual auction dinner raises funds for student activities. We need your help to make this event a success by donating items for the auction. So don’t forget
to bring items with you for either the silent or live auction. We’ll be accepting items for the auction at the registration desk from Sunday morning onwards.

2nd Biennial WDA-Latin America Section Conference

24 September 2015 in Bogotá, Columbia

José Luiz Catão-Dias

The Second WDA-LA Conference will be held in Bogotá, Colombia from September 24-27 at Universidad de La Salle, sede Chapinero. The program is full but registration is ongoing. Presentations will be in Spanish, Portuguese and English and presenters will be from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Peru, Venezuela, Spain, South Africa and the United States. This highlights our growth and consolidation as a WDA section. In addition, nine keynote speakers from Argentina, Brazil, Colombia, Mexico and the United States are confirmed. The conference will provide a broad and highly qualified overview on current Latin American research in the field of wildlife health.

It is also a pleasure to announce that all registered and participating students presenting their research work may run for “best paper” in the following categories: undergraduate, graduate and poster. Winners will be granted with a full 2016 WDA annuity.

There will be a pre-conference trip (limited space) to Chingaza National Park in the Eastern Cordillera one of the most important regions for wildlife in Colombia ! For more information see: (http://www.parquesnacionales.gov.co/portal/es/ecoturismo/region-amazonia-y-orinoquia/parque-nacional-natural-chingaza/) You may see spectacled bear, deer, tapir, pumas, Andean condors, Cock-of-the-rocks, woolly monkeys, ocelots and toucans.

We would like to extend the invitation to all participants of the pre and post conference workshops: 1) Wildlife health: in situ approach; 2) Disease impact in wild populations. Registration for that is at http://www.wda.veterinariosvs.org/talleres/ The proceeds from these workshops will be donated to support student chapter activities in our section.

Finally, free registration for the photo contest is now available at http://www.wda.veterinariosvs.org/concurso-pt/

More information available at: www.wda.veterinariosvs.org or via email at wdala2015@gmail.com

Results of the 2015 WDA Elections

Thanks to all those who voted in the 2015 WDA Elections. Congratulations go to…

Marcy Uhart, President
Deb Miller, Vice President
Mark Drew and Alonso Aguirre, Council Members-at-Large

These folks will take office July 30, 2015.
And a great big thanks goes to our outgoing members, Rick, Patti, and Dolores for all their efforts!

WDA Website Analytics

Dave Jessup

To help us better understand how our website serves WDA, and how we might optimize it, Cindy Serraino, WDA's Executive Assistant and Website Manager put together some website analytics. Some of the results are highlighted below.

The daily use numbers showed weekly cycling that seems to correspond well with the release of eblasts. For example, in April 2015 eblasts were sent on April 9, 16, 23, and 28. At or around that time, website visits increased by about 500 visits per day and then tapered off. So, members are reading and responding to eblasts, and it appears that providing lots of links in eblasts gets them to the WDA Website. There was a steady 400-900 or more hits a day over 3 months, which seems like a good traffic level.

Global distribution by country showed where our website visitors are coming from. There were a good number of visits from countries and cities where we have no members - clearly we are attracting a global audience.

The most frequently visited pages for April were the Homepage, Jobs, Conference, JWD Online Submissions, Wildlife Disease Classics, and the Newsletter.

The language translation information showed the predominance of English of course, but the neat thing is that literally dozens of languages are being used by anywhere from a few dozen to hundreds of visitors. This is a good measure that we are reaching some places where we do not even have members (yet).

Just under half of the visitors to the WDA website are new visitors. Indeed thousands of new users a month.
Highly pathogenic avian influenza (HPAI) virus was first detected in wild waterfowl in the United States during the investigation of an early December 2014 waterfowl mortality event, later attributed to aspergillosis, in Washington State (Pacific Flyway). Subsequent field and laboratory investigations, conducted by the USGS National Wildlife Health Center (NWHC), the U.S. Department of Agriculture (USDA), Washington Department of Fish and Wildlife, and the Washington Animal Disease Diagnostic Laboratory, identified three HPAI viruses (H5N8, H5N2, and H5N1) in wild birds in this region. As of the end of May 2015, these three HPAI strains have been detected in varying degrees in commercial poultry operations, backyard poultry operation, wild birds, and captive wild birds in the Pacific, Central, and Mississippi Migratory Bird Flyways.

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<td>EA H5N8 (3), EA/AM H5N2 (7)</td>
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<td>Backyard (3) Commercial (13)</td>
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<td>Mississippi</td>
<td>Backyard (8) Commercial (168)</td>
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<td>EA H5N8 (1), EA/AM H5N2 (175)</td>
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†Data from USDA as of May 31, 2015, see http://www.usda.gov/avianinfluenza for details and up-to-date information
‡EA = Contains genetic material from Eurasian strain only, EA/AM = Contains genetic material from both Eurasian and American strains, H5 = H5 icA assay identified Eurasian H5 clade 2.3.4.4 with no viral isolation for further subtyping

There have been no reports of clinical disease in North American wild ducks attributable to these HPAI viruses. However, multiple HPAI-infected Canada geese (*Branta canadensis*) exhibited neurologic signs (head thrown back, jerky movements, and swimming in circles) shortly before death. The range and prevalence of severe neurological signs in HPAI-infected geese is not well characterized; please contact the NWHC or your State wildlife health official to report sick geese or other birds. These HPAI viruses are believed to be the primary or underlying cause of death in various raptor species including red-tailed hawk (*Buteo jamaicensis*), Cooper’s hawk (*Accipiter cooperii*), captive gyrfalcons (*Falco rusticolus*), peregrine falcon (*F. peregrinus*), captive great-horned owl (*Bubo virginianus*), bald eagle (*Haliaeetus leucocephalus*), and snowy owl (*B. scandiacus*).

The NWHC is continuing to monitor for HPAI by testing sick and dead migratory birds submitted for cause of death determination, and has expanded submission criteria to include single raptor mortalities, birds exhibiting neurological impairment, and birds with high relative risk of exposure based on proximity to infected domestic birds. During the first quarter of 2015, the NWHC accepted approximately 80% more avian submissions than during the first quarter of 2014, and has screened nearly 300 birds for HPAI through these diagnostic submissions. In addition, the NWHC has partnered with multiple state agencies to test over 1,200 hunter-harvested birds (waterfowl and turkey) for HPAI. The NWHC is also a partner in the Interagency Steering Committee for Surveillance for Highly Pathogenic Avian Influenza in Wild Birds.

To date, no humans or other mammals have shown signs of disease from these particular viruses but field personnel handling live or dead wild birds should take appropriate precautions. As we learn more about these HPAI viruses, submission and testing criteria may change; please consult with a field epidemiologist at the NWHC if you have any
White-nose syndrome winter 2014/2015 summary

Iowa joined the growing list of States and provinces with confirmed cases of white-nose syndrome (WNS) during the winter 2014/2015 surveillance season, bringing the current total to 26 States and 5 provinces. A combination of carcasses, non-lethal skin swabs, and/or environmental samples collected from 18 States and representing 99 bat hibernacula were evaluated by the USGS National Wildlife Health Center (NWHC) for Pseudogymnoascus destructans (Pd), the fungus that causes WNS. No further westward expansion of the disease was identified this past winter, although Pd now extends into eastern Oklahoma (Delaware County). At the time of this report, no updates on disease progression were available from Minnesota or Mississippi, which first identified Pd in Spring 2013 and 2014, respectively. Interestingly, 2014/2015 surveillance conducted in Rhode Island (within the WNS endemic area) failed to detect the presence of Pd. Winter surveys indicated that bat populations, although small, have remained stable there since surveys began in 2011. No new bat species were added to the list of those susceptible to WNS. Of the 14 cave hibernating species tested by the NWHC during winter 2014/2015 (including 6 western bat species) only little brown bats (Myotis lucifugus), Indiana bats (M. sodalis), tricolored bats (Perimyotis subflavus), and Northern long-eared bats (M. septentrionalis) tested positive for Pd.

A large winter bat mortality event involving approximately 2,000 little brown bats was investigated at an active mine complex in Pierce County, Wisconsin. Bronchopneumonia (for which the underlying cause was not identified) was consistently found among specimens examined at the NWHC; WNS was not detected in this event. Partners are reminded that the NWHC provides diagnostic and epidemiological assistance to investigate unusual bat mortality events throughout the year. Federal, State, or tribal agencies wishing to participate in the expanded national Pd surveillance strategy should contact Dr. Anne Ballmann (608-270-2445, aballmann@usgs.gov) to discuss options for their region.

Exposure of U.S. bald and golden eagles to contaminants

The USGS National Wildlife Health Center (NWHC), in collaboration with the USFWS Mountain Prairie Region 6 Environmental Contaminants Program, has initiated a study to evaluate opportunistically recovered bald (Haliaeetus leucocephalus) and golden (Aquila chrysaetos) eagle carcasses for cause of death determination, as well as to determine exposure to anticoagulant rodenticides, lead, and mercury. These contaminants were identified in 2014 as priorities for FWS Region 6. Our goal is to evaluate up to 140 eagle carcasses annually over the next two years from the Dakotas, Montana, Nebraska, Colorado, Kansas, Utah, and Wyoming for evidence of exposure to these contaminants. Data generated from this effort will expand upon the bald and golden eagle toxicant studies being performed in other FWS regions, and will also supplement on-going golden eagle assessments conducted by the USGS Snake River Field Station (Boise, Idaho). Based on the results of these studies, FWS will develop public outreach materials that describe exposure pathways and suggest alternatives to lead ammunition and anticoagulant rodenticides. In addition to our current focus on Region 6, the NWHC accepts any intact and freshly dead bald or golden eagles for cause of death determination from Federal, State, or tribal partners. Diagnostic data are shared with USFWS for management purposes and eagle carcasses deemed free of zoonotic disease are transferred to the National Eagle Repository for distribution to Native American tribal members.

To view, search, and download historic and ongoing wildlife morbidity and mortality event records nationwide visit the Wildlife Health Information Sharing Partnership event reporting system (WHISPers) online database: http://www.nwhc.usgs.gov/whispers/

To request diagnostic services or report wildlife mortality: http://www.nwhc.usgs.gov/services/