



July 2008

Jenny Powers, Editor

Newsletter of the Wildlife Disease Association



Members' Corner

A Plethora of Student Opportunities Awaits August 2008 in Edmonton, Canada

Leslie Reperant and Heather Fenton

The organizing committee of the 57th Annual International Conference of the WDA to be held in Edmonton, Alberta, Canada (August 3-8, 2008), and the student activities committee of the WDA have joined their efforts to design an exceptional program for participating students. It includes quality time for students and WDA mentors to meet and share experience and knowledge.

A short **workshop** will be held highlighting potential career pathways associated with opportunities in the field of wildlife diseases will be led by Prof. Ted Leighton from the Canadian Cooperative Wildlife

Health Centre late on Sunday afternoon, August 3. Prof. Leighton will present his thoughts on Wildlife Health Science for a World in Crisis. Other wildlife disease specialists will be available after the presentation to answer student questions and participate in a discussion of potential career options for students with wildlife disease interests. The **student mentorship program** will

begin on Sunday evening, August 3, with a gathering of Students and Mentors, preceding the general Alberta Welcome hospitality event. The student mentorship program is designed to provide an opportunity for students to meet with someone that has been in the business for a while. Students will be matched up with mentors ahead of time. Mentors will be encouraged to introduce their students to a number of different people facilitating valuable contacts. We hope the interactions before, during, and after the mentoring program give each person positive experiences that foster collegiality and guidance for future direction in the field of Wildlife Disease.

A **student mixer** will be held on Monday, August 4 from 5:00 to 6:45pm, to allow students to meet and share their experiences with each other as well as slices of pizza, to feed both mind and body.

Last but not least, the **Student Poster Award** and the **Terry Amundson Student Presentation Award** will be judged by select members of the audience of the WDA meeting on Monday, August 4 and Tuesday, August 5, respectively. Winning students will be presented with awards during the banquet on August 7. New this year, "Student Snappy Summaries" by students presenting a poster will occur from 7:00 to ~7:30pm, immediately prior to the student poster competition. The aim of the snappy summaries is to give each student 2 minutes (sharp!) to describe an oral synopsis of their posters. The action will be fast and furious so don't miss it... and don't be late! We hope that this program will encourage students to become more involved in the Association. A self-guided presentation of WDA student chapters will be displayed in the registration and conference service room, to further inform interested students for opportunities to actively participate in the WDA!

Inside this issue

<i>WDA News</i>	2
<i>WDA Students</i>	6
<i>News From the Field</i>	7
<i>WDA Sections</i>	12
<i>Training and Education</i>	17
<i>Employment Opportunities</i>	20
<i>Meetings and Conferences</i>	22

Changing of the Guard—Newsletter Editor

“The more things change, the more they remain... insane.”

Michael Fry and T. Lewis, *Over the Hedge*

This quote reminds me that sometimes a little insanity in your professional life gives perspective on the rest of life. When Pauline Nol, the current WDA Supplement/Newsletter editor extraordinaire and recently elected WDA Secretary, approached me earlier this year to see if I would be interested in assuming the



Jenny Powers and Pauline Nol enjoying a little time cross-country skiing

WDA newsletter editor duties, I thought she must be crazy. To fit one more thing onto an already overflowing plate seemed completely unreasonable maybe even impossible. After a little cajoling, however, she had me convinced that this was not just one more task

to be completed but an opportunity to meet and work with an amazing group of dedicated people and become an integrated part of WDA. Once I had a chance to think about this idea I had to agree. Tasks are responsibilities that fill our time, sometimes challenge our intellect, and often make us insane but opportunities are those tasks that offer more fulfilling rewards like new relationships with others interested in the same subject, novel approaches to problem solving, and alternative perspectives on important issues. This makes me excited about taking on the newsletter responsibilities and I look forward to working with WDA council as well as the general membership to make this a living document that keeps us connected

as a group of people committed to understanding and advancing the study and management of wildlife diseases in a rapidly changing world. I hope to meet you all at conferences and converse with you across the electronic airwaves in between gatherings.

Please feel free to send me your thoughts on news, events, and communication to keep the association current and alive. Now, back to the insanity....

Jenny Powers

I'm Five and a HALF!

When I took over as Editor to the Supplement to the Journal of Wildlife Diseases at the very end of 2002, my first daughter was just born. Although I had been a member of WDA for several years by then, I consider December 2002 the real beginning of my WDA life. Being asked to be Supplement editor was a great privilege, but admittedly, it was a challenge that I wasn't sure I was equal to, with all the other milestones being thrown at me at the time. Little did I know of the degree of support WDA members from around the world would extend to me to enable the production of a Supplement every quarter. In addition, the experience of sitting on Council and the Editorial Board over the years was the perfect initiation into the amazing inner workings of the WDA organization. The amount I have learned from this great bunch of folks is immeasurable! So, both my daughter and I, at this very moment, will insist we are five and a HALF, she in human years, and me in WDA years. But at the end of 2007, I figured it was time to pass the baton. And it absolutely thrills me to know that Supplement, recently reborn as the online Newsletter of the WDA, has been placed in the extremely capable and unquestionably sane hands of Jenny Powers. Thanks Jenny, so much, for being willing to take on the role of Newsletter Editor and bring a fresh approach and new ideas to WDA. And I'm sure a little bit of insanity will be appreciated too. And thank you WDA for a fantastic first five and a HALF years. I intend to continue growing up and enjoying my WDA life for many years to come, hopefully at least as long as my real age...twenty nine and a HALF! *Pauline Nol*

WDA News

Council Decisions on WDA Fees and Student Funds

Ed Addison

Fees

Council set the 2009 membership and institutional subscription fees during an April 2008 teleconference meeting. In 2009, there will be options for 'online only' memberships and subscriptions in addition to our current option of 'print and online' memberships and subscriptions. 'Online only' members and subscribers will have reduced fees as compared to 'print and online' fees. There will be no increase in the membership or subscription fees for 2009.

Council based their decisions on many factors including our expenses relative to our annual revenue, requests from some members and subscribers for an 'online only' option for receiving the *Journal of Wildlife Diseases* and on comparison of our fee structures with those of similar science societies.

For many years, our Association had little flexibility in our financing. However, during the past 4-5 years, we have experienced considerable annual revenue in excess of expenses. It follows that for the first time in our 50+ years of existence, we have realized sizeable revenue from our investments on an annual basis. The increased annual investment revenue has allowed us to support a variety of initiatives for meeting our mission that we could not previously contemplate.

Council compared our 2008 subscription fees with that of other similar societies and found that, depending on the type of subscribing institution, our subscription fees [\$270-\$340/year] were ranked 11th-16th among the 28 societies examined, i.e. generally average. Fees for 2008 for our regular members ranked 22nd in comparison with fees for regular members in 30 similar societies. It would certainly appear that we have comparatively low fees for regular members. Our student member fees at \$40 were the 24th lowest fees as compared to student fees for 26 other societies. As a society, we can say that our annual membership fees are exceptionally 'student friendly'.

In summary, no increased rates for 2009 and reduced rates should you elect to receive the *Journal of Wildlife Diseases* in an electronic format only.

Students

The 2007 annual meeting in Estes Park, Colorado was not only extremely successful in terms of the scientific contributions, location, enjoyment and number of registrants but also financially. As a result, Council decided at the April 2008 teleconference meeting to contribute an additional \$13,000 to the WDA Student Activities Fund. This has led some members of Council to comment on how well the student members are doing in the WDA and that we need to celebrate our students and support of students.

Students have always been a vital part of the WDA. In the 'pre-internet' days, many of us as students learned about and became committed to the WDA and its mission by being introduced to the Association by our graduate advisors. There are numerous WDA members who are the fourth academic generation to be WDA members and most likely there are fifth generation members in our group.



Photo by: Ralph Ardwood

Our consistent data on numbers of student members date back to 1981. From 1981 to 1987 there were over 200 student members with maximum numbers of 250 in each of 1985 and 1986. It was

WDA News

another 20 years before there were as many as 200 of us as student members. From 1988 to 2004, student memberships dropped as low as 123 and there were many years with 130-150 student members. More recently, the number of student members has increased such that we have had 214, 213, 301, and over 268 student members in 2005, 2006, 2007 and to April 30 in 2008 respectively. Over the years, a lot has changed in addition to the numbers of students in the Association.



Photo by: Bruce Gill

The "Best Student Paper Award" dates back prior to 1972. Terry Amundson, a recipient of the Best Student Paper Award, was Chair of the Student Activities Committee when he died in a traffic accident. The award was renamed the "Terry Amundson Student Presentation Award" [TASPA] in 1987. Starting in 1978, the recipient of the TASPA received \$100, in addition to a plaque. What has been awarded to the recipient since has varied, sometimes including registration fees for the meeting. The recipient of the TASPA currently receives \$250 and plaque. In some years, there have been a number of honorable mention acknowledgements and the recipients have received a plaque and sometimes a \$75 award.

A student travel award was also an early award of the WDA. There is usually one award presented annually although the number has varied over the years from 0 to 4. In 1978, the student travel award was renamed the "WDA Student Research Recognition Award" [SRRA], the name it retains. Beginning in 1984, the research of the recipient of the SRRA has been profiled with presentation of a special lecture at each annual meeting. By 1994, the recipient of this award also received a plaque and up to \$1,000 to cover costs for travel to and registration at the annual meeting. The monetary part of the SRRA was increased to 'up to \$2,000' for the 2001 meeting in

South Africa and permanently to 'up to \$2000' in 2004. In 2007, when Shelly Lachish of the University of Queensland was the recipient of the SRRA and traveling from Brisbane to Colorado, the monetary award was increased 'up to \$3000' for 2007 and later 'up to \$5,000' for future years.

The WDA Scholarship was introduced in 1995 with a monetary award of \$2,000 to be spent on graduate education.

Participation in the student awards program has varied over the years. In the early 1980s, participation was low. The Student Activities Committee started to promote the awards by sending letters. This process reached its apex, when with Mark Drew as chair, the committee sent out 652 letters announcing the WDA student awards! There have been on average 5-6 applicants/year for the WDA scholarship. The number of applicants for the Student Research Recognition Award has varied from 0 to 8 and is usually close to the average of 4 applicants/year. From 1981 to 2004, the number of students in the Terry Amundson Student Presentation Award sessions varied from 6 to 19 and averaged 14. However, in 2005, 2006 and 2007 there were 42, 21 and 40-60 applicants, respectively, to participate in the presentation award sessions. The committee has had to adapt the process such that some applicants present oral presentations and others poster presentations. Adapting to the challenge of providing some opportunity for all interested students is an ongoing process. Certainly all of us can be pleased at the increased involvement of the student membership in the annual program.

Prior to 1989, the student awards program was funded from the WDA general revenue. The first WDA auction was held in 1989 at a meeting organized by Anne Fairbrother and others in Corvallis, Oregon. In most years since then, proceeds of the auction have been used to develop the Student Activities Fund. Other contributions to the fund have been donated by members when paying annual dues and by the recent Council decision to contribute \$13,000. The Student Activities Fund presently contains over \$50,000 enough to create investment revenue on an annual basis to assist with funding of student activities.

WDA News

Student involvement in the Association has diversified into much more than the student awards program. This led in 2001 to the WDA Council separating a Student Awards Committee from the Student Activities Committee. The membership of the Association voted on changes in the Constitution in 2001. One amendment was the inclusion of a student member on the annual Council. The student member on Council is elected to a two-year term. To date, Samantha Gibbs, Claire Jardine and Leslie Reperant have filled that position. Our current president, Charles van Riper, has seen that there is a student member on almost all of the WDA committees. There are now 4 student chapters of the WDA: in Europe, at the University of Georgia, at the University of Saskatchewan and at Washington State University.

In 2006, Leslie Reperant organized a student workshop in France for student members of the European Section of the WDA [EWDA]. In 2007, Miriam Maas, Lineke Begeman, Leslie and others organized a highly successful EWDA student workshop in Sithonia, Greece. In addition to invited speakers, 60 students from 17 countries participated.

The Wildlife Disease Association is not only a 'student friendly' organization but also one in which students have become increasingly active and empowered. This is exceedingly important to our future. As a small group of committed members of the Association, we can all be pleased that we are in our 44th year of publishing the *Journal of Wildlife Diseases* and are pursuing other initiatives to attain our mission "to acquire, disseminate and apply knowledge of the health of diseases of wild animals in relation to their biology, conservation and ecology, including interactions with humans and domestic animals". Many long term Association members of today were yesterday's student members and we can all hope that students will remain welcome and involved!

Information products available from the NBII Wildlife Disease Information Node (WDIN):

Chris Marsh

Wildlife Disease News Digest

(<http://wdin.blogspot.com>) - Published regularly by

WDIN (<http://wildlifedisease.nbii.gov>), the Digest combs web-based, news sources for the latest wildlife disease-related news and journal articles and then bundles this information into a concise, easy-to-read, newspaper-like format. This news can be delivered to you. See below for how to sign up for Digest email alerts (eAlerts).

Global Wildlife Disease News Map

(<http://wildlifedisease.nbii.gov/wdinNewsDigestMap.jsp>) - Digest readers can gain a geographical perspective on the news by viewing news stories on a map. To learn more about this mapping tool, go to the recent USGS press release, **Web Tool Puts Wildlife Disease News on the Map** <http://www.usgs.gov/newsroom/article.asp?ID=1928>

How to sign up for Digest eAlerts

1. Click on the url below and follow on-screen instructions, <http://www.feedburner.com/fb/a/emailverifySubmit?feedId=1312376>
2. Complete the very short on-line form
3. A confirmation email will be sent to your email account
4. Once confirmed, you will start receiving emails. If you have problems, contact Cris Marsh at cmash@usgs.gov. You can unsubscribe at any time.

In addition to our eAlert service, the Digest can deliver wildlife disease news to you through a variety of other forms including, RSS feeds, Web-based blog, or a home page widget. For information about our other news delivery services, which are all available at no cost, go to

<http://wildlifedisease.nbii.gov/wdindigest.html>

To learn more about WDIN, read about us in the June issue of *The Wildlife Professional*, Desktop Diagnosis: A User's Guide to the NBII Wildlife Disease Information Node

WDA Students

Washington State University Student Chapter

Palouse Student Chapter of Wildlife Disease Association

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The mission of the Palouse Student Chapter of the Wildlife Disease Association is to: *facilitate communication, mentoring, and collaboration between students, researchers, clinicians, field professionals, and support staff from various fields of science in order to advance understanding of wildlife health, conservation, and disease and to educate students about career opportunities.*

The chapter was created in March of 2007, and has approximately 20 members from Washington State University. Members include veterinary students, undergraduate and graduate students from a variety of departments and programs. Faculty and staff members also regularly attend lectures and participate in meetings. A major goal for the chapter is to provide a venue through which students, faculty and staff from otherwise separate programs can interact and discuss topics of common interest related to wildlife. Through these discussions we hope to gain a better understanding of the complex relationships between factors that affect wildlife health including population dynamics, habitat, nutrition, pathogens, and host animal defense. To date we have invited guest speakers from the local universities and out of state organizations to present lectures on their work or research with wildlife species including dolphins, vultures, grizzly bears, wolves, cougars and black rhinoceros. We have hosted two necropsy wet labs for purposes of learning field necropsy technique, discussing how to identify signs of disease and how to protect one's self from zoonotic diseases. A monthly journal club meeting

hosted by the chapter is dedicated to reading and discussing peer reviewed journal articles about current wildlife disease issues. Ultimately these activities will enrich our connections to the local community, the greater community of wildlife professionals, and the animals that share our world.

Faculty Advisor: Dr. William Foreyt. For more information on detailed activities of this student chapter please contact Katherine Gailbreath (contact information above).

Create a Student Chapter of the WDA

Student Chapters of the WDA aim at:

Educating students interested in wildlife health and disease about the profession, career opportunities, job qualifications and education, and externships, volunteer, and research opportunities.

Enhancing the skills of students interested in wildlife health and disease through lectures, workshops, conferences, and field trips.

Connecting students interested in wildlife health and disease to mentors in WDA through the faculty advisor and guest lecturers.

Student Chapters are run by student officers, including a president and a vice-president, and if filled, a secretary and a treasurer, under the supervision of a faculty advisor.

Become a WDA Student Ambassador

We have created a special power point slide show to introduce wildlife health students to the WDA. This presentation includes information on how to start a WDA student chapter. Become a WDA student ambassador by presenting the power point slide show to students at your University and actively take part in the promotion of the Wildlife Disease Association!

Visit our website at <http://www.wildlifedisease.org> or please contact Leslie Reperant, WDA Student Representative on Council, with any questions or ideas at reperant@princeton.edu.

News from the Field



National Wildlife Health Center's Quarterly Wildlife Mortality Report

<http://www.nwhc.usgs.gov>

Outbreaks of Avian Cholera in the Central Flyway (NM, KS, NE)

Incidents of avian cholera have not occurred in the Central Flyway in recent years, but three separate events occurred in early 2008. Bosque del Apache National Wildlife Refuge in New Mexico reported the worst outbreak of avian cholera in refuge history. The die-off began in December and subsided in early March with the death of an estimated 7000 birds. The majority of losses were reported in lesser snow geese, but Ross' geese, multiple duck species, American coots, and sandhill cranes were also affected. Minor cholera outbreaks occur yearly, but the last large scale events were in 1999-2000 and 2000-2001. In addition to the NM outbreak, avian cholera was found in the Rainwater Basin refuges in southcentral Nebraska and Lake McKinney in west Kansas with mortality estimates of 300 and 550 waterfowl, respectively. Avian cholera had not been reported in Kansas since 1998. The Rainwater Basin Wetland Management District comprises 60 different waterfowl production areas: Hultine, Gleason, and Lindau WPA were confirmed to be affected by avian cholera.

Tundra Swan Mortality from Avian Cholera in the Lower Klamath Area (CA)

Avian cholera mortality began in northern California at the end of January 2008 at Lower Klamath and Tule Lake National Wildlife Refuges followed by mortality at Butte Valley WA in mid February. USFWS Refuge staff collected 1194 Tundra swans and 1164 northern pintails on Lower Klamath NWR with more than 410 birds collected from Tule Lake NWR. CA Dept of Fish & Game staff collected 709 birds and estimated the mortality at Butte Valley WA to be 10,000. Snow geese, ruddy ducks, American wigeon, and American coots were some of the other species affected. Scavenging activity by bald eagles likely reduced the number of carcasses reported. Occasional bald eagles were confirmed to be affected by avian cholera over the past two years in this area. Tundra swan mortality due to avian cholera had not been reported since 1999, but annual swan mortality from lead poisoning continues in this area.

Unusual mortality in Red-tailed Hawks from Chlamydiosis (CA)

Mortality investigations by San Diego County veterinarians and CA Dept of Fish & Game have confirmed *Chlamydiophila* bacteria in red-tailed hawks in southern California coastal counties. The first reports of sick hawks came in mid-January from wildlife rehabilitators in San Diego County of birds that were emaciated and not responding to treatment. Chlamydiosis also is known as Parrot fever, psittacosis, and ornithosis. It is not commonly reported in raptors. The infectious bacteria can be spread by fluids and excreta, particularly when materials dry and the bacteria become airborne. Chlamydiosis can be a serious human health concern and should be mentioned to a treating physician by anyone that handles infected birds.

Elk mortality from lichen poisoning in Red Rim area of Wyoming (WY)

Nearly 80 elk found sick and unable to stand were euthanized in the Red Rim area near Rawlins spring 2008. Elk were thought to have eaten a lichen, *Xanthoparmelia chlorochroa*, that produces a toxic metabolite. Affected elk initially produce red urine. Severely afflicted animals are alert, but not able to stand prior to death. The first reported occurrence of lichen poisoning of this type was an event in 2004 that killed more than 400

News from the Field

elk. Both 2004 and 2008 were particularly harsh winters that may have contributed to elk searching out new sources of forage. Researchers with Wyoming Game and Fish and University of Wyoming have examined the incidents.

Enteritis in American crows USA (multiple states)

Since late December 2007, deaths among American crows associated with a reovirus-like virus have been observed in five states: New York, Massachusetts, Iowa, Ohio, and New Jersey. Low mortality in crows with enteritis and isolation of reo-like viruses has been diagnosed at the NWHC nearly annually since 2001. Other states with a history of crow enteritis mortality include KY, MD, WA, WI, KS, PA, MO and the District of Columbia. Although pathogenicity tests have not yet been performed, it is speculated that the virus replicates in the intestines, and is transmitted through the feces. The disease seems more common at winter roost sites, although it has also been seen sporadically in summer and fall.

Bat white-nosed syndrome in the northeastern USA (NY, VT, MA, and CT)

White-nose syndrome (WNS) among bats reappeared in the eastern states this winter after first being reported in caves near Albany, NY in February 2007 by the New York State Department of Environmental Conservation. Since March 2008, biologists and cavers have documented deaths of thousands of bats of various species at over 25 caves and mines in New York, Vermont, Massachusetts, and Connecticut. Little brown bats have sustained the highest mortality. Although mortality has not been seen in the endangered Indiana bats, they are being watched closely. WNS also was observed in West Virginia and Pennsylvania without associated mortality. While the "white-nose" describes various fungi seen on the muzzles (also limbs and tail webs) of some bats, the predominant finding among affected animals has been emaciation. Fungal growth may be secondary to the underlying cause of death. Diagnostic investigations are continuing at labs at New York Department of Conservation, Cornell University, USGS-National Wildlife Health Center, and Disney's Animal Kingdom., Bay Lake FL .

Quarterly Wildlife Mortality Report January 2008 to March 2008

State	Location	Dates	Species	Mortality	Diagnosis	Labsites
AK	Montague Island, Chugach NF	03/15/08-ongoing	Bald Eagle	6	Open	NW
AR	City of Marion	01/08/08-01/10/08	Ross' Goose	12 (e)	Trauma	NW
AR	City of McNeil	01/23/08-01/27/08	American Goldfinch	50 (e)	Salmonellosis	NW
			Pine Siskin			
			Purple Finch			
AR	De Witt Area	01/01/08-01/05/08	Mallard	6	Undetermined	NW
AZ	Maricopa County	01/30/08-01/31/08	Mourning Dove	20	Toxicosis: strychnine	NW
			Inca Dove			
			Unidentified Pigeon			
CA	Butte Valley WA, Lower Klamath Area	02/19/08-04/01/08	Tundra (Whistling) Swan	10,000 (e)	Avian cholera suspect	NON
			Northern Pintail			
			Lesser Snow Goose			
			Ross' Goose			
			Greater White-fronted Goose			
CA	Alameda County	02/13/08-02/22/08	Ruddy Duck	260	Avian cholera	CFG, UCD
			Mallard			
			Bufflehead			

News from the Field

			Northern Shoveler			
			American Wigeon			
CA	Sacramento County	02/09/08-02/09/08	American Coot	20 (e)	Trauma: impact	NON
CA	Yolo County	02/20/08-02/24/08	American Coot	400 (e)	Avian cholera suspect	CFG
CA	Bay Delta	01/21/08-02/01/08	Canvasback	30 (e)	Avian cholera suspect	NON
			American Coot			
			Tundra (Whistling) Swan			
CA	Lower Klamath NWR	12/10/07-01/07/08	Mallard	100 (e)	Lead poisoning	NW
			Northern Pintail			
			American Coot			
CA	Marina State Beach	01/20/08-01/21/08	California Gull	100 (e)	Undetermined	NON
CA	Merced NWR	02/22/08-03/01/08	Ross' Goose	156	Avian cholera	NW
			American Coot			
			Mallard			
			Greater White-fronted Goose			
			Northern Pintail			
CA	Napa-Sonoma Marshes WA	02/05/08-02/07/08	Ruddy Duck	12 (e)	Avian cholera suspect	CFG
			Gadwall			
CA	Sutter County	01/20/08-01/25/08	Lesser Snow Goose	5	Avian cholera suspect	CFG
CA	Humboldt County	01/07/08-01/14/08	American Coot	1,200 (e)	Avian cholera suspect	CFG
			Ruddy Duck			
			Northern Shoveler			
			Bufflehead			
			Western Sandpiper			
CA	Sutter County	01/10/08-01/17/08	American Coot	800 (e)	Avian cholera suspect	CFG
			Greater White-fronted Goose			
			Pied-billed Grebe			
			Gadwall			
			Ruddy Duck			
CA	Redding	02/12/08-ongoing	Skunk	60 (e)	Open	UCD
			Unidentified Fox			
			Raccoon			
			Gray Fox			
CA	Richardson Bay	02/08/08-02/22/08	Greater Scaup	303	Avian cholera	NW, UCD
			Clark's Grebe			
			Bufflehead			
			Western Grebe			
CA	Sacramento Delta	01/18/08-01/29/08	Tundra (Whistling) Swan	400 (e)	Avian cholera	UCD
			Northern Pintail			
			Mallard			
			Violet-Green Swallow			
			American Coot			
CA	Shasta Valley WA	02/28/08-03/06/08	American Wigeon	100	Avian cholera suspect	NON
			American Coot			
			Canvasback			
			Northern Pintail			
			Green-winged Teal			
CA	Southern California	01/01/08-ongoing	Red-tailed Hawk	18 (e)	Chlamydiosis	SDC, UCD
CA	Tule Lake NWR, Lower Klamath NWR	01/31/08-04/13/08	Northern Pintail	4,581	Avian cholera	NW
			Tundra (Whistling) Swan			
			American Wigeon			
			American Coot			
			Snow Goose			

News from the Field

CA	Mendocino County	02/01/08-02/08/08	American Coot	48 (e)	Avian cholera suspect	NON
CA	Yolo Bypass Wildlife Area	01/29/08-01/30/08	American Coot	30 (e)	Avian cholera suspect	CFG
CA	Yolo County	02/01/08-02/08/08	American Coot	4,600 (e)	Avian cholera suspect	NON
			Unidentified Duck			
CT	New Milford	03/17/08-ongoing	Big Brown Bat	***	Open	NW, UCT
			Northern Long-eared Bat			
			Little Brown Bat			
DE	Millsboro	01/14/08-01/28/08	Common Grackle	200 (e)	Open	NW
FL	Milton	03/07/08-03/26/08	Eastern Brown Pelican	10 (e)	Botulism suspect	NW
FL	Miami	02/06/08-03/03/08	Muscovy Duck	36 (e)	Botulism type C	FL, NW, SCW
			White Ibis			
FL	Ponte Vedra Beach	03/27/08-04/18/08	Northern Gannet	12	Undetermined	FL
			Common Loon			
IA	Blue Lake	02/15/08-03/13/08	Mallard	110 (e)	Lead poisoning	NW
			Canada Goose			
IA	Cedar Rapids	02/13/08-02/22/08	Canada Goose	20 (e)	Aflatoxicosis	NON
IA	Saylorville Reservoir	01/02/08-01/08/08	Canada Goose	150 (e)	Aflatoxicosis suspect	NW
ID	Ada County	02/29/08-03/01/08	Canada Goose	19	Toxicosis: zinc phosphide	NW
			American Wigeon			
			Raccoon			
			Wood Duck			
KS	Lake McKinney	03/14/08-ongoing	Lesser Snow Goose	550 (e)	Avian cholera	NW
			Mallard			
			Northern Pintail			
			American Wigeon			
			Green-winged Teal			
MA	Chester Mines	01/15/08-ongoing	Eastern Pipistrelle	200 (e)	Open	NW
			Northern Long-eared Bat			
			Little Brown Bat			
MD	Frederick	03/29/08-04/01/08	Fish Crow	11	Open	MD, NW
MD	Salisbury Area	01/05/08-01/07/08	Common Grackle	100 (e)	Toxicosis suspect	MDA, NW
			Blue Jay			
MI	Lake St. Clair, Multiple Counties	03/02/08-03/19/08	Canvasback	1,500 (e)	Malnutrition	ST
			Redhead Duck			
MI	Leland Harbor	03/09/08-03/28/08	Lesser Scaup	100 (e)	Malnutrition	MI
			White-winged Scoter			
			Long-Tailed Duck (AKA Oldsquaw)			
			Unidentified Goldeneye			
			Bufflehead			
MN	Beaver Township	02/27/08-04/01/08	Rock Dove	40 (e)	Open	NW
MO	Ten Mile Pond, Conservation Area	01/05/08-01/07/08	Lesser Snow Goose	75 (e)	Avian cholera	NW
NE	Rainwater Basin WPAs	02/26/08-03/26/08	Lesser Snow Goose	430	Avian cholera	NW
			Northern Pintail			
			Mallard			
			Ross' Goose			
			American Wigeon			
NJ	Trenton	01/10/08-01/14/08	American Crow	5 (e)	Enteritis: hemorrhagic	NJ, NW
NM	Bosque del Apache NWR	12/01/07-03/03/08	Lesser Snow Goose	7,000 (e)	Avian cholera	NMV
			Ross' Goose			
			Mallard			
			Unidentified Sandhill Crane			
			Northern Pintail			

News from the Field

NY	Hailes Cave	01/01/08-ongoing	Big Brown Bat Little Brown Bat	***	Open	COR, NW
NY	Multiple Counties	12/25/07-04/01/08**	American Crow	1,000 (e)	Enteritis: hemorrhagic	NW, NY
OH	Coshocton	01/07/08-03/01/08	American Crow	150	Enteritis: hemorrhagic	NW
OK	Major County	02/04/08-02/07/08	Unidentified Sandhill Crane	85 (e)	Open	NW
OR	Portland	01/22/08-01/25/08	American Robin	50 (e)	Undetermined	NW
OR	Washington County	01/04/08-01/06/08	Canada Goose	7	Toxicosis: zinc phosphide	NW
SD	LaCreek NWR	02/20/08-02/24/08	Mallard Unidentified Goose	10	Predation	NW
VT	Aeolus Cave	01/01/08-ongoing	Little Brown Bat Northern Long-eared Bat	1,000 (e)	Open	NW
WA	Birch Bay	03/01/08-03/03/08	White-winged Scoter Trumpeter Swan	11 (e)	Pulmonary edema	NW
WA	Moses Lake	03/20/08-03/24/08	Ring-billed Gull	50 (e)	Open	NW
WA	King County	02/16/08-02/23/08	Varied Thrush	28	Undetermined	NW
WY	Red Rim Area	03/01/08-04/01/08**	Elk	80 (e)	Toxicosis: <i>Parmelia</i> spp. (lichen)	WY

Update:

—	Atlantic Coast, Multiple States	06/16/07-07/15/07	Greater Shearwater	2,500 (e)	Emaciation	NW
CA	Los Angeles County	08/27/07-12/17/07	Gray Fox Raccoon	12	Canine distemper	OT
CA	Butte Sink NWR, Colusa NWR, Sacramento NWR,	11/29/07-02/14/08	American Coot Northern Pintail Northern Shoveler Gadwall American Wigeon	3,647	Avian cholera	NW
CA	San Joaquin NWR	12/12/07-01/04/08	Aleutian Canada Goose American Coot Lesser Snow Goose Green-winged Teal	421	Avian cholera	NW
MA	Jeremy Point	10/01/07-12/10/07	Common Eider	2,400 (e)	Hepatic necrosis	NW
MT	Georgetown Lake	09/19/07-11/01/07	American Coot	2,500 (e)	Emaciation, Parasitism: <i>Cyathocotyle bushiensis</i> , Parasitism: Coccidiosis	NW

(e) = estimate, ** Cessation date estimated, *** Mortality estimate not available at this time, "suspect" = Diagnosis is not finalized, but field signs and historic patterns indicate the disease.

California Fis

h & Game (CFG), Cornell University (COR), Florida Fish & Game (FL), Maryland Diagnostic Laboratory (MD), Maryland Department of Agriculture (MDA), Michigan Department of Natural Resources (MI), New Jersey Department of Fish & Game (NJ), New Mexico Veterinary Diagnostic Services (NMV), No Diagnostics Pursued (NON), USGS National Wildlife Health Center (NW), NY State Department, DEC, Division of Fish, Wildlife & Marine Resources (NY), Other (OT), Southeastern Cooperative Wildlife Disease Study (SCW), Dan Diego County Veterinary Diagnostic Lab (SDC), Various State Labsites (ST), UC Davis (UCD), University of Connecticut Wildlife Laboratory (UCT), Wyoming State Veterinary Laboratory (WY).

Written and compiled by: Nathan Ramsay, Anne Ballmann - Eastern US, Krysten Schuler - Western US, and Jennifer Bradsby - Technician

To report mortality or receive information about this report, please contact the USGS National Wildlife Health Center, 6006 Schroeder Road, Madison, WI 53711

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News from the Field

Species:

Avian

Aleutian Canada Goose (*Branta canadensis leucopareia*); American Coot (*Fulica americana*); American Crow (*Corvus brachyrhynchos*); American Goldfinch (*Carduelis tristis*); American Robin (*Turdus migratorus*); American Wigeon (*Anas Americana*); Bald Eagle (*Haliaeetus leucocephalus*); Blue Jay (*Cyanocitta cristata*); Bufflehead (*Bucephala albeola*); California Gull (*Larus californicus*); Canada Goose (*Branta Canadensis*); Canvasback (*Aythya valisineria*); Clark's Grebe (*Aechmophorus clarkia*); Common Eider (*Somateria mollissima*); Common Grackle (*Quiscalus quiscula*); Common Loon (*Gavia immer*); Eastern Brown Pelican (*Pelecanus occidentalis*); Eastern Pipistrelle (*Perimyotis subflavus*); Gadwall (*Anas strepera*); Fish Crow (*Corvus ossifragus*); Greater Scaup (*Aythya marila*); Greater Shearwater (*Puffinus gravis*); Greater White-fronted Goose (*Anser albifrons*); Green-winged Teal (*Anas crecca*); Inca Dove (*Columbina inca*); Lesser Scaup (*Aythya affinis*); Lesser Snow Goose (*Chen caerulescens*); Long-tailed Duck (*Clangula hyemalis*); Mallard (*Anas platyrhynchos*); Mourning Dove (*Zenaida macroura*); Muscovy Duck (*Cairina moschata*); Northern Gannet (*Morus bassanus*); Northern Pintail (*Anas acuta*); Northern Shoveler (*Anas clypeata*); Pied-billed Grebe (*Podilymbus podiceps*); Pine Siskin (*Carduelis pinus*); Purple Finch (*Carpodacus purpureus*); Redhead Duck (*Aythya americana*); Red-tailed Hawk (*Buteo jamaicensis*); Ring-billed Gull (*Larus delawarensis*); Rock Dove (*Columba livia*); Ross' Goose (*Chen rossii*); Ruddy Duck (*Oxyura jamaicensis*); Sandhill Crane (*Grus canadensis*); Snow Goose (*Chen caerulescens*); Trumpeter Swan (*Cygnus buccinator*); Tundra Swan (*Cygnus columbianus*); Varied Thrush (*Zoothera naevia* or *Ixoreus naevius*); Violet-Green Swallow (*Tachycineta thalassina*); Western Grebe (*Aechmophorus occidentalis*); Western Sandpiper (*Calidris* or *Erolia mauri*); White Ibis (*Eudocimus albus*); White-winged Scoter (*Melanitta fusca*); Wood Duck (*Aix sponsa*)

Mammalian

Big Brown Bat (*Eptesicus fuscus*); Elk (*Cervus elaphus nelsoni*); Gray Fox (*Urocyon cinereoargenteus*); Little Brown Bat (*Myotis lucifugus*); Northern Long-eared Bat (*Nyctophilus arnhemensis*); Raccoon (*Procyon lotor*); Skunk (*Mephitis*)

WDA Section News

News from Europe

Paul Duff

Visit the EWDA website at www.ewda.org and find out about our activities, including conferences, workshops, courses and members' interests. The website is kindly provided free of charge by the UK Central Science Laboratory. Please contact r.delahay@csl.gov.uk if you have any announcements or other material for submission to the site.

HPNAI H5N1 Wild Bird Surveillance in Europe

Highly Pathogenic Notifiable Avian Influenza (HPNAI) H5N1 continued to dominate wildlife disease during the first quarter of 2008. In Great Britain, HPNAI

H5N1 was detected in ten wild Mute swans (*Cygnus olor*) and one Canada goose (*Branta canadensis*) in South Dorset during January and February. The carcasses were collected as part of routine, Defra-funded 'found dead' AI wild bird surveillance activities (AIWBS) from within the Fleet and wetland reserves along the adjacent South Dorset coast. This forms part of the EC-mandated AIWBS programme conducted to provide an early warning of the presence of HPNAI H5N1 in the European Union (European Commission, 2007). During investigation of the wild bird incident in Dorset, no evidence of spread to the domestic poultry population was detected. Phylogenetic analyses indicated the causative virus to be related to con-

WDA Section News

temporary HPNAI H5N1 viruses from continental Europe (Defra, 2008).

Elsewhere in Europe HPNAI H5N1 was detected from a live healthy common pochard (*Aythya ferina*) from Lake Sempach, Switzerland during February (OIE, 2008a). Genetic sequencing revealed the virus to show high homology to the viral sequences found in Eastern Europe during 2007. It was reported that since October 2007 some 200 live birds had been sampled and tested negative around Lake Sempach, with no clinical evidence of infection in wild or domestic birds in the five weeks following sampling in that, or other regions of Switzerland.

Disease due to HPNAI H5N1 was however more widespread around the Black Sea. Along the north coast of Turkey six poultry outbreaks were reported, the source of which has been attributed to wildfowl hunting activities, dressing of hunted carcasses and subsequent contact between wildfowl viscera and backyard chickens (FAO, 2008). Poultry outbreaks were also reported from the Crimea (Ukraine), and over the same time period HPNAI H5N1 was also detected in eight dead wild birds found in three coastal locations in that region. These findings suggest wild birds have played a role in the introduction of the virus into the Black Sea basin (OIE, 2008b; FAO, 2008; OIE, 2008c).

Defra, (2008). Highly pathogenic avian influenza – H5N1 in swans in Dorset. Epidemiology Report 1A Page Street, London, SW1P 4PQ, United Kingdom. Version 1, Released 29 January 2008.
<http://www.defra.gov.uk/animalh/diseases/notifiable/disease/ai/pdf/epireport-hpaiswan080129.pdf>

European Commission, (2007). DG Health and Consumer Protection. Wild bird surveillance in the EU: See Guidelines for AI surveillance in wild birds and poultry.

http://ec.europa.eu/food/animal/diseases/controlmeasures/avian/eu_resp_surveillance_en.htm

FAO, (2008). FAOAIDEnews, Avian Influenza Disease Emergency Situation Update 51, 16 March 2008.

http://www.fao.org/docs/eims/upload//241290/AIDEnews_mar08_no51.pdf

OIE, (2008a). Weekly Disease Information Vol. 21 - No. 14, 3 Apr, 2008.

http://www.oie.int/wahidprod/public.php?page=weekly_report_index&admin=0

OIE, (2008b). Event summary: Highly pathogenic avian influenza, Turkey.

http://www.oie.int/wahidprod/public.php?page=event_summary&reportid=6700

OIE, (2008c). Event summary: Highly pathogenic avian influenza, Ukraine. http://www.oie.int/wahidprod/public.php?page=event_summary&this_country_code=UKR&reportid=6698

Richard Irvine, Jill Banks, Bhudipa Choudhury & Ian Brown, EU/ OIE/ FAO International Reference Laboratory for Avian Influenza and Newcastle Disease, VLA Weybridge, New Haw, Addlestone, Surrey, KT15 3NB.

Isolation of European bat lyssavirus type 2 (EBLV-2) in a Daubenton's bat found in Surrey

On 7 May 2008 lyssavirus antigen was detected in the brain of a bat submitted under the passive surveillance scheme to detect lyssaviruses in British bats. This scheme has been operating since 1987. Subsequent testing isolated virus and a multiplex real-time PCR amplification assay confirmed that the virus was European bat lyssavirus type 2. Genomic sequence derived from the virus nucleoprotein revealed that this virus was 100% identical to an earlier isolation of EBLV-2 from a bat in Staines, Surrey (Fooks and others., 2004, *Vet. Rec.*155, 434-435).

The bat was originally found injured, following a cat attack, by a member of the public in August 2007, in Bushy Park, Surrey. It was passed to a number of experienced bat handlers for rehabilitation, but required the amputation of one wing by a vet shortly after entering captivity. Over the winter months it appeared healthy but towards the end of April it became aggressive. It became progressively weaker and underwent euthanasia on May 2nd and sent to VLA-Weybridge on the 6th.

WDA Section News

Investigations are ongoing but this could be the longest documented incubation period (>9 months) for EBLV-2. This case is the 7th isolation of EBLV-2 from English Daubenton's bats since 1996 and once again emphasises the need for ongoing surveillance of UK bats and the need for bat handlers to obtain anti-rabies vaccination.

Nick Johnson, Rabies and Wildlife Zoonoses Unit, VLA Weybridge.

Evaluation of carnivores and scavengers as sentinels for new and emerging diseases

Anna Meredith MA VetMB CertLAS DZooMed
MRCVS, Royal (Dick) School of Veterinary Studies
University of Edinburgh

The objective of this study is to evaluate, as a proof of principle, the concept that carnivore and scavenger species have the potential to act as sentinels for new and emerging diseases in the UK. Emerging infectious diseases have an enormous impact on public health, livestock economies and wildlife conservation, and many of these diseases can infect multiple host species, including wild animals, which often act as reservoirs of infection. Innovative approaches are needed to meet the challenges of emerging diseases, particularly to overcome the difficulties associated with detecting infection in wild animal hosts. Carnivores may be useful sentinels for several reasons; they are susceptible to a wide range of human and animal pathogens (43% of all zoonotic pathogens infect carnivores), seroconversion without development of clinical disease has been observed for a wide range of pathogens, and they predate or scavenge multiple potentially-infected host species (e.g. rodents, rabbits, birds) thus acting as "samplers" and "bioconcentrators". Therefore they may provide a sensitive, efficient, and cost-effective means of detecting infectious agents. The project is obtaining blood and tissue samples from carnivore/scavenger species (rural cats, foxes, and corvids) and prey species (rodents and rabbits), in selected study sites in northern England and Scotland. Evidence of infection with selected pathogens (*Leptospira* species, *Coxiella burnetii*, *Encephalitozoon cuniculi*, and rabbit haemor-

rhagic disease virus) is being evaluated and infection patterns compared in the carnivores and their prey, in order to attempt to answer the following key questions:

Does sampling carnivores provide useful information about the presence and prevalence of infection in a given area?

How can we identify suitable carnivore species for detection of different pathogens?

How does carnivore sero-prevalence reflect overall prevalence of infection in a given area?

Is it more cost-effective to sample carnivores rather than primary/reservoir hosts?

How could carnivore sampling be incorporated into future surveillance programmes for endemic pathogens or those representing higher level threats?

Does sampling carnivores provide additional information not available via sampling primary/reservoir hosts alone?

Anna Meredith, Royal (Dick) School of Veterinary Studies, University of Edinburgh

Study of Rabies in the Wild carnivores of Albania

As a constituent part of the Western Balkans, Albania is rich in wildlife including many wild carnivores. Albania also is bounded on three sides by the neighbouring countries of Macedonia, Montenegro, Kosovo and Greece. It is presumed that neighbouring countries often serve as corridors for migratory wild carnivores (especially from Montenegro and Kosovo), including wolves, foxes, wild cats, jackals etc. This group of wild animals has created a risk for the outbreak of rabies, particularly in North Albania. A case of rabies was confirmed in 2006 near Morina village and a suspected case of rabies occurred in a cow from the village of Nikoliq, in the Has district of northern Albania. Between 1976 and 2000, cases of rabies have declined, and the country was classified as free from the disease, although in the neighbouring countries (Slovenia, Serbia, Montenegro, Croatia and Kosovo) the disease was increasing. Rabies reoccurred in Albania in March 2001 in

WDA Section News

the Morina village, in the Kukes district, affecting a domestic dog. The dog was probably bitten by a wolf. Before this case, a study was initiated for rabies in wild carnivores in Albania. Our study for evidence of rabies infection in wild carnivores in northern Albania, utilized the fluorescent antibody test and the mouse inoculation test. During 2002, 65 samples from wild carnivores were examined. The results are presented in table 1. (see Table1).

Table 1. Samples obtained in 2002

<i>Carnivores species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	26	1
Wolf (<i>Canis lupus</i>)	15	0
Wildcats (<i>Felis silvestris</i>)	2	0
Weasels (<i>Mustela nivalis</i>)	2	0
Total	45	1

In November 2002 a Red Fox was diagnosed as rabies positive from Qereti village in the Puka district of northern Albania.

During 2003, further two foxes were found positive from Gjorica village in the Bulqiza district (northern Albania).

Table 2. Samples obtained in 2003

<i>Carnivores species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	33	2
Wolf (<i>Canis lupus</i>)	12	0
Wildcat (<i>Felis silvestris</i>)	1	0
Weasel (<i>Mustela nivalis</i>)	5	0
Total	51	2

In May 2004, two wolves were found to be positive for rabies in the village of Helshan, Zahrishte in the Has district (northern Albania) see Table 3.

Table 3. Samples obtained in 2004

<i>Carnivore species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	17	0
Wolf (<i>Canis lupus</i>)	11	2
Wildcat (<i>Felis silvestris</i>)	2	0
Weasel (<i>Mustela nivalis</i>)	7	0
Total	37	2

In 2005 there were no rabies cases reported.

Table 4. Samples obtained in 2005

<i>Carnivore species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	23	0
Wolf (<i>Canis lupus</i>)	14	0
Wildcat (<i>Felis silvestris</i>)	0	0
Weasel (<i>Mustela nivalis</i>)	4	0
Total	41	0

In 2006 one fox were found positive for rabies, and this coincided with an outbreak in Nikoliq village in the Has district(northern Albania) see Table 5

Table 5. Samples obtained in 2006

<i>Carnivores species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	21	1
Wolf (<i>Canis lupus</i>)	12	0
Wildcat (<i>Felis silvestris</i>)	1	0
Weasel (<i>Mustela nivalis</i>)	2	0
Total	35	1

In 2007 rabies cases were not reported. See table 6

Table 6. Samples obtained in 2007

<i>Carnivores species</i>	<i>Number of samples</i>	<i>Positive samples</i>
Fox (<i>Vulpes vulpes</i>)	22	0
Wolf (<i>Canis lupus</i>)	3	0
Wildcats (<i>Felis silvestris</i>)	0	0
Weasels (<i>Mustela nivalis</i>)	4	0
Total	27	0

WDA Section News

Conclusions

1. This is the first study of its kind into rabies in wild carnivores in Albania. Despite the fact that the study was prompted by the emergency situation of rabies in the surrounding countries, it provides us with some background information and paves the way for other studies.
2. Confirmed rabies cases were identified in the villages Morine (Kukes), Qereti (Puka), Gjorica (Bulqiza) Perolaj (Has) and Nikoliq (Hasi). All the villages are in northern Albania
3. The outbreaks of Rabies in northern Albania depend on the circulation of wild carnivores between neighbouring countries where rabies is a problem.
4. We will continue with the examination of wild animals to check if they are infected with rabies as this may allow epidemiological interventions.

Korro. K*, Berxholi. K*, L. Klima*, R. Keci*, Qafmolla. L., B.Bizhga °., Agricultural University of Tirana, *Faculty of Veterinary Medicine, °Institute of Veterinary and Food studies

Mass mortality in harbour seals and harbour porpoises in the Baltic caused by an unknown pathogen.

A recent article in the Veterinary Record (Harkonen et al) describes the increased mortality in European harbour seals (*Phoca vitulina*) and harbour porpoises (*Phocoena phocoena*) observed in Denmark and Sweden in the summer of 2007. In 1988 and 2002, outbreaks of phocine distemper virus (PDV) caused mass mortality in harbor seals, and as an increased mortality was seen in 2007, another outbreak of PDV was feared. The mortalities in the outbreaks of 1988 and 2002 were estimated at 10,000 seals in total. The gross findings in the dead seals examined in 2007 were similar to the lesions seen in 1988 and 2002, but PDV was not detected. Histopathological examinations on a small number of seals suggested a viral infection, and virus sequencing is underway at the National Veterinary Institute in Uppsala, Sweden. In Denmark, 163 dead seals were washed ashore in Denmark, and another 122 seals along the west coast of Sweden together with 28 harbour porpoises. Observations of around 100 seals described the animals

as having a disturbed dorsal silhouette, with intermittent hump formation in the shoulder region. Seals in the final stages suffered from severe dyspnoea and sometimes coughed up blood. The increased mortality can be caused by a previously unrecognized pathogen.

Harkonen T, Bäcklin BM, Barrett T, Bergman A, Corteyn M, Dietz R, Harding KC, Malmsten J, Roos A, Teilmann J. "Mass mortality in harbour seals and harbour porpoises caused by an unknown pathogen." *Vet Rec.* 2008 Apr 26;162(17):555-6.

European Student Chapter of the Wildlife Disease Association Promoting Shared Knowledge

Several excellent web sites have been set up by the Student Chapter of the WDA and the EWDA. These are listed here but a better description of the purposes of the sites is given in **the EWDA Bulletin**.

Tool #1: the EWDA discussion E-list
(http://groups.yahoo.com/group/EWDA_discussion)

Tool #2: the EWDA electronic journal club
(<http://ewdaeic.blogspot.com>)

Tool #3: the EWDA Student Chapter Mentor Network
(http://spreadsheets.google.com/pub?key=pau5Inp6RSL6bvjYK_PP0YQ&qid=0)

Lastly, to further promote shared knowledge across Europe, the EWDA Student Chapter is developing a **network of Country Representatives** whose role is to promote the activities proposed by the Chapter and the involvement of wildlife health students in their countries.

Please visit our website to learn more about the EWDA Student Chapter, its objectives and activities, and become a member!

www.ewda.org/studentchapter.html

European Section

Material for publication in *News from Europe* can include recent wildlife disease outbreaks and new diseases in Europe, short case and meeting reports; job and scholarship announcements. We encourage submissions, and will help with the English lan-

WDA Section News

guage if required. The deadline for the next issue is August 2008.

Please mail, fax or e-mail submissions to, Paul Duff, VLA Diseases of Wildlife Scheme (VLADoWS), VLA Penrith, Merrythought, Calthwaite, PENRITH, Cumbria, CA11 9RR, United Kingdom, *e-mail* p.duff@vla.defra.gsi.gov.uk. Fax ++44(0)-1768-885314 /phone ++44(0)-1768-885295.

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Wildlife Veterinarian Section. Jonathan Sleeman, Virginia Department of Game and Inland Fisheries, 4010 West Broad Street, Richmond, VA 23230, Tel: (804) 367 9492, Fax: (804) 367 9495. Jonathan.Sleeman@dgif.virginia.gov.

Training and Education

Visit the JWD website at <http://www.wildlifedisease.org> for more information on training opportunities

MSc in Wild Animal Health and MSc in Wild Animal Biology

The Institute of Zoology at the Zoological Society of London and the Royal Veterinary College at the University of London offer Master's of Science in wild animal health and wild animal biology.

One year full time study starting each Autumn, leading to an MSc qualification from the University of London. Courses are delivered in partnership with the Zoological Society of London.

MSc Wild Animal Health applicants require a first degree from a recognised veterinary school and learn alongside experts in the field, to acquire knowledge and skills in wild animal management and the epidemiology, treatment and control of disease.

MSc Wild Animal Biology applicants require a first degree in Biology or Zoology. Participants acquire an understanding of wild animal health and welfare through practical exposure, and receive training in relevant research methodologies.

As our courses are popular, we recommend early application. Visit our website or call to find out more. Web: www.rvc.ac.uk/postgrad. Tel: +44 (0) 20 7468 5134

Dallas Zoo and Dallas Aquarium Veterinary Student Preceptorship

A four to eight-week preceptorship offers exposure to clinical zoo and aquarium veterinary practice at a large metropolitan zoo. The student will work closely with the veterinary and keeper staff and receive an introduction to husbandry, restraint/immobilization, basic medical procedure techniques, and necropsies of zoo animals, the unique aspects of veterinary management of animals in a zoo setting, and the MedARKS recordkeeping system. An onsite library is available for use. Responsibilities will be assigned based on the student's areas of interest and experience level. The student is expected to complete a project and present results to the veterinary staff, and will be responsible for local transportation, housing, and food. Applicants should be a fourth year veterinary student (or in final year of non-U.S. veterinary

Training and Education

program) and have completed four weeks of a clinical medicine or surgery rotation before the start of the preceptorship. Negative tuberculin skin test within 60 days of the start of the preceptorship, current tetanus vaccination, and personal health insurance are required. Applicants should send a letter of intent, curriculum vitae, contact information for three references, and the name of their Zoo/Exotic Animal advisor to: Tim Storms, Associate Veterinarian at Dallas Zoo and Dallas Aquarium, 650 South R.L. Thornton Hwy., Dallas, Texas 75203-2996.

Sr. Veterinary Student Preceptorship in Avian and Conservation Medicine

A four to six-week preceptorship in Avian and Conservation Medicine is being offered to a senior-year veterinary student by the International Crane Foundation (ICF) in Baraboo, Wisconsin. The preceptor will train with the Veterinary Services Unit of the Conservation Services Department in all phases of the clinical practice, but have opportunities for interaction with the Crane Conservation Department to learn captive propagation, husbandry, and management of this unique family of birds. The preceptor can expect to gain practical experience in crane capture, transport, anesthesia, preventive medicine, disease surveillance, and the contribution of veterinary medicine to crane conservation including field project support and professional consultations. Preceptors are encouraged to complete and report on a research or laboratory project during their stay. Opportunities for visiting the University of Wisconsin School of Veterinary Medicine and the National Wildlife Health Center in Madison, WI will be made available to interested preceptors. No stipend is available for this position; however, on-site housing in the ICF Guesthouse will be provided depending on availability at the time the preceptorship is scheduled. Applicants should send a cover letter, curriculum vitae, or resume and one letter of recommendation from a faculty member of their home institution to: Barry Hartup, DVM, Director of Veterinary Services, International Crane Foundation, E-11376 Shady Lane Road, Baraboo, WI 53913, email hartup@savingcranes.org. Please view our website at www.savingcranes.org.

Training Available in Fish Diagnostics, Inspections, and Laboratory Methods

The US Fish and Wildlife Service Fish Health Centers provide laboratory and field examination services to the National Fish Hatcheries. Our main emphasis is to assist the hatcheries in producing quality fish that will contribute to the enhancement and restoration of aquatic ecosystems. At the Olympia and Idaho Fish Health Centers, the work may involve travel to field sites to perform diagnostic examinations and collect samples that are then evaluated in our laboratories. Routine testing procedures include bacteriology (biochemical, ELISA, and PCR methods), virology (cell culture, serological, and PCR methods), parasitology (microscopic and PCR methods), histology, and clinical chemistry. Training may be arranged for one day or several weeks at one or both of these laboratories depending on the interests and availability of the individual. In general, most broodstock inspections are performed from September through November, juvenile inspections are performed from January through April, and wild fish surveys are conducted from March through September. Routine diagnostic examinations are performed year round and special projects are conducted as time and necessity permit. For more information, please contact Joy Evered DVM, at the Olympia Fish Health Center; email joy_evered@fws.gov or Marilyn Blair DVM, at the Idaho Fish Health Center; email marilyn_j_blair@fws.gov.

Directory of Post-Graduate Educational Opportunities in Zoo and Wildlife Medicine

The World Association of Wildlife Veterinarians has recently produced a Directory of Post-Graduate Educational Opportunities in Zoo and Wildlife Medicine. The Directory covers opportunities in over fifty countries and is a must for veterinary students or graduates interested in furthering their careers in the field of wildlife medicine. For further information, please contact the Secretary of the WAWV at: F.Scullion@zoo.co.uk.

WILDLIFE PATHOLOGY

Short Course August 2008 Taronga Zoo



DIAGNOSTIC PATHOLOGY OF THE DISEASES OF AQUATIC, AERIAL AND TERRESTRIAL WILDLIFE

21 - 24 August 2008

The **CYBEC FOUNDATION** has provided generous financial support to bring you this fascinating short course for the first time in Australia.

This intensive Short Course will focus on the ecology of disease, diagnosis of vector-borne diseases, human influences on wildlife disease, followed by a systematic review of the diseases of aerial, terrestrial and aquatic wildlife. It is open to anyone with an interest in wildlife disease, including pathologists, veterinarians, conservation biologists, veterinary students and postgraduate students

Confirmed speakers include internationally renowned wildlife pathologists: Drs SCOTT FITZGERALD; GARY WOBESER; RICHARD MONTALI; and JUDY St. LEGER along with several highly respected local speakers.

Coordinated by The Australian Registry of Wildlife Health in collaboration with the C. L. Davis Foundation and supported by the Department of Agriculture, Fisheries & Forestry, the Wildlife Disease Association - Australasia and Seaworld (USA)

Registration is only \$412.50 (including GST), a modest fee for a comprehensive review of the diseases of wild fish, amphibians, reptiles, birds and mammals.

TO REGISTER YOUR INTEREST IN ATTENDING, PLEASE CONTACT: arwh@zoo.nsw.gov.au, Phone (02) 9932 4368 or download a draft agenda and registration form from our website: www.arwh.org/ARWH/OtherPublications



Employment

Veterinary Epidemiologist

The Centers for Disease Control and Prevention (CDC) is seeking veterinary epidemiologists for its Human Animal Interface Project with an emphasis on zoonotic influenzas. Possible assignments include Viet Nam, Egypt, Bangladesh and Nigeria. CDC is seeking applicants with the following qualifications

Background in veterinary medicine

International public health experience

Training in epidemiology

Field experience

Teaching and public speaking skills for technical and lay audiences

Strong interpersonal skills and the ability to assume a leadership role in interacting with animal health organizations

Ability to be a mentor and interactive leader within the local agricultural community.

Some knowledge of infectious diseases, including influenza, among animals and humans.

The Human Animal Interface (HAI) project will strategically place veterinarians with strong human public health backgrounds (or scientists with both veterinary and human public health training) in positions where they will participate in research aimed at understanding risk factors for transmission of zoonotic influenzas from animals to humans, and enhance communication between human health and animal health agencies. Although each country placement will be somewhat unique, all of the positions will have in-country CDC support as well as Atlanta-based supervision.

This project will work toward establishing linkages between human and animal disease surveillance systems by enabling the embedded veterinary epidemiologists to use designated project funds for improved surveillance and communication. The expected outcome is better coordination of surveillance systems for reporting avian influenza in animals before human disease is detected and the collection of new data that

will fill critical gaps in knowledge related to human-animal interactions and facilitate improved prevention strategies.

If you are interested and able to relocate please send a resume or updated CV to CCID_HAI@CDC.GOV

Wildlife Veterinarian

Montana Fish, Wildlife, and Parks is hiring for the position of full time permanent Wildlife Veterinarian. Opening date 6/18/08; closing date 7/18/08. Duty station: Bozeman, Montana. Salary: \$44,466 – \$55,582. For more information contact: Montana Fish, Wildlife, & Parks, Human Resources, 1420 E. Sixth Ave., Helena, MT, 59620. (406) 444-1223 fwpemp@mt.gov.

Field Veterinarian

WILDLIFE CONSERVATION SOCIETY – Field Veterinarian

POSITION TITLE: Assistant Field Veterinarian – Asia (Cambodia)

REPORTS TO: Regional Field Veterinarian – Asia (M. Gilbert)

DIRECTLY COORDINATES AND SUPERVISES: Technicians and Assistants

The Wildlife Conservation Society, a U.S. based international organization, seeks candidates to assist in coordinating and advising a program of avian influenza surveillance in wild birds, under an initiative funded through the National Institute of Health and National Institute of Allergy and Infectious Diseases. This initiative will build a system of health monitoring with a focus on avian influenza that will expand understanding of pathogen prevalence and dynamics in wild birds, both free-flying and in the wildlife trade.

This work will contribute information to the wild bird Global Avian Influenza Network for Surveillance (GAINS) program led by the Wildlife Conservation Society. GAINS provides technical support and leadership in surveillance of wild birds for avian influenza by expanding operational understanding of viral strains

Employment

and transmission of influenza viruses and improving dissemination of information to all levels of the U.S. Government, international governments and organizations, international partners, and the private sector.

The program requires a veterinarian for field-based activities who would be responsible for helping the WCS Regional Veterinarian to implement program priorities and approaches; oversee training and biological monitoring efforts; communicate with NGOs, governmental organization and with other institutions. This position is based in Southeast Asia , with extensive international travel.

Responsibilities

To assist the Regional Field Veterinarian to develop health monitoring components into existing WCS conservation programs, which will involve collaboration with WCS Global Conservation Programs and other WCS entities

To assist the Regional Field Veterinarian in developing new surveillance programs through novel partnerships;

To assist the Regional Field Veterinarian in training field biologists to handle wildlife and collect biological samples;

To assist the Regional Field Veterinarian in training foreign professionals in wildlife health issues;

To assist the Regional Field Veterinarian in advising foreign governments on wildlife health and management issues;

To assist the Regional Field Veterinarian in providing veterinary services to field conservation projects;

To give direct oversight to research assistants on all aspects of field sampling and operations related to the field sampling for AI research.

To assist the Regional Field Veterinarian in conducting research on wildlife health as time allows;

To provide complete and regular reports to Regional Field Veterinarian as required by funding agencies and sources

To contribute scientific and lay publications regarding wildlife health and conservation;

To participate in public speaking, public relations work, and fund raising activities;

To contribute to, enlarge, and uphold the Society's policies toward the Equal Employment Opportunities for women, minorities, veterans, the handicapped, and other protected groups.

Education and Experience

Doctorate in Veterinary Medicine or equivalent

3 years experience in working with non-domestic species

Foreign language skills

The willingness to work in complex traditional and diverse cultural settings

The willingness to work flexible hours that may include weekends and public holidays.

An ability to adapt approaches to local cultures and project situation, while maintaining a high professional standard

An ability to adapt approaches to local cultures and project situation, while maintaining a high professional standard

For more information contact **Suheil Vargas** sVargas@wcs.org



Photo by: Bruce Gill

Meetings and Conferences

57th Annual Meeting of the Wildlife Disease Association. August 3-8, 2008; Edmonton, Alberta Canada

Make tracks for Edmonton and gather with wildlife disease folks from far and wide. The University of Alberta and the Alberta Fish and Wildlife Division proudly host the 2008 annual meeting of the Wildlife Disease Association. Local organizers are tweaking

2008
Wildlife Disease
Association
Edmonton



the traditional template for WDA meetings. For example, the wildlife management agencies of British Columbia, Northwest Territories, and Yukon are participating as Regional Partner Hosts. The meeting also is held in conjunction with the American Association of Wildlife Veterinarians and the Canadian

Association of Zoo and Wildlife Veterinarians. Given our location and the makeup of our host group, the meeting will focus on western and northern aspects of wildlife diseases and parasites, including a symposium entitled *Wildlife Health in a Changing North*.

Traditional elements of successful WDA meetings will of course not be tampered with – the auction, picnic, banquet, and student presentations are embedded in the program. A hospitality poster session, and field trips ending in an outdoor picnic in a venue steeped in wildlife disease history, also are being planned. All information regarding the meeting can be found at <http://www.biology.ualberta.ca/parasites/WDA08/> It's a work in progress so check the web site for new information as the pieces of the puzzle come together.

Don't forget your auction items!

The 8th Conference of the European Wildlife Disease Association, Rovinj, Croatia, October 2-5, 2008.

The European Wildlife Disease Association (EWDA) will hold its biennial Conference on the Adriatic coast, in Rovinj, Croatia. The EWDA invites members and others interested in all aspects of wildlife diseases and in promoting wildlife health to submit papers and

attend the Conference. Through the quality and the content of presentations we strive to make the EWDA Conference the leading event for the dissemination of important scientific information, as well as an enjoyable one. Veterinarians, pathologists, zoologists, wildlife biologists, epidemiologists, ecologists, and any person interested in wildlife health should attend and join together in what will be a challenging opportunity to discuss the imminent issues surrounding wildlife diseases. Associates from an array of animal and human health fields will also attend, promoting and sharing professional knowledge and discussing topics of mutual interest. As we invite you to Croatia, we want you to share with us the feeling, and the spirit of "The Mediterranean as It Once Was". The Croatian Veterinary Institute will host the event. The town of Rovinj is one of the most popular seaside resorts in Croatia. It is located on the west coast of the Istrian peninsula and as such is a focal point in the Northern Adriatic, offering a wide range of interests for visitors in a picturesque ancient town, surrounded by beautiful pine forests. For more information on the conference program and important dates please visit the conference website at <http://www.ewda2008.org>.

Symposium on the Ecology of Plague and its Effects on Wildlife.

The **Symposium on the Ecology of Plague and its Effects on Wildlife** will be held November 4 - November 6, 2008 in Fort Collins, Colorado, USA at the Hilton Hotel located adjacent to Colorado State University. A symposium will be held to present the latest information on the ecology of plague and its impacts on wildlife. Our mission in sponsoring this symposium is to increase the ability of scientists and resource managers to understand, evaluate, and mitigate wildlife risks associated with plague. We invite you to join us in this important and timely symposium. For more information on this symposium please go to <http://www.fort.usgs.gov/Plague> or contact Laura Ellison, U. S. Geological Survey, Fort Collins Science Center, 2150 Centre Avenue, Bldg C, Fort Collins, CO 80526-8118, (970) 226-9494, ellisonl@usgs.gov.



Annual Conference September 20th - 26th, 2008 Kioloa, NSW

WILDLIFE DISEASE ASSOCIATION
(AUSTRALASIAN SECTION)



“The Role of Health in Wildlife Management and Ecology”

A highlight of the Australasian section is its Annual Conference. These are typically held away from capital cities, at natural locations of major interest to members.

In addition, the planned guest speaker is Dr Roy Bengis, the Chief State Veterinarian of Kruger National Park, zoo consultant and author of over seventy papers.

contact **Chris Bunn**
(chris_b@webone.com.au)
or **Dave Spratt**
(Dave.Spratt@csiro.au)

For more information, go to www.wda-aust.org.

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