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Business office:
1-800-627-0629, ext 221
sstarr@allenpress.com

Pauline Nol, Editor
USDA/APHIS
National Wildlife Research Center
4101 LaPorte Avenue
Fort Collins, CO USA 80521
Telephone: 970-266-6126
e-mail: pauline.nol@aphis.usda.gov

Visit the WDA website at: <http://www.wildlifedisease.org>

President's Corner

WDA is a dynamic organization with members of many ages from all over the world. We have student members and regular members, including many who are retired. Our organization is completely dependent on all members because the WDA cannot function without the annual dues of our members and the income associated with publications in the Journal of Wildlife Diseases. In addition, the WDA would not function without all work done by volunteers in Council, Committees, Sections, the Journal, and elsewhere. Without all these dedicated people who spend hours to support the WDA, there would be no WDA. We are the WDA!

Late last year, we lost three dedicated members: Beth Williams, Tom Thorne, and Al Kocan, all distinguished and very important members for our organization. The loss is hard for their families, friends, and colleagues, but also for all those WDA members who did not personally know Tom, Beth, or Al, but who were nevertheless exceptionally well served by them through their activities within the WDA. Al, Beth, and Tom all served in several different capacities in the WDA and their contribution was enormous and more than many other members. It is important to remember that people like Al, Tom, and Beth in many ways functioned as "enzymes" and made a lot of other people work enthusiastically for the WDA. I hope their long contribution to the WDA can be an inspiration for many others to serve our Association in the future. We need active members all over the world.

It is a pleasure to notice that there are new and active WDA sections in many different parts of the world. In December, I visited the United Arab Emirates (UAE) and the third conference of the African and Middle East Section of WDA. Well over 100 registered participants from 25 different countries attended the meeting. I would like to officially thank the Government of UAE the Abu Dhabi Wildlife Centre, Jacob Mwanzia, and other people of the organizing committee for arranging this meeting and their great hospitality.

The meeting venue was the fantastic Rotana Beach Hotel in Abu Dhabi. The program was of the same quality with interesting papers presented on emerging diseases, zoonoses, conservation medicine, and a lot of additional areas. It was very interesting to note that despite this conference concentrating on disease problems of the Middle East and African wildlife, there is so much in common with wildlife diseases in other parts of the world. Although both the vertebrate species and the ecosystems differ, the diseases and the problems very often seem to be the same.

The plan for next year is to arrange the meeting in North Africa. I strongly recommend that you go if it is at all possible for you. It is worth it.

Another recommendation is to register for the upcoming International Conference in Cairns, Australia in late June. This meeting looks like it is going to be a fantastic meeting in a wonderful place. Please visit the WDA home page and get more information there. I look forward to seeing you in Cairns.

-Torsten Mörner, President

WDA NEWS

IN MEMORIAM



Drs. Tom Thorne and Beth Williams receive the WDA's Distinguished Service Award together in Fairbanks, Alaska in 1996.

E. Thomas (Tom) Thorne and Elizabeth S. (Beth) Williams

Tom and Beth, two very close friends, outstanding members of the Wildlife Disease Association and wildlife disease scientists of great skill died on December 29, 2004. En route from Denver to Laramie during a snow storm, their truck collided with the flat-bed trailer of a truck that jack-knifed across their lane.

The loss of Tom and Beth leave grieving families, friends, and colleagues all over the world. The wildlife disease community will never be the same. Tom and Beth were not only regular members of the WDA; they were the most positive and enthusiastic members that one could find. Everyone who has been to a WDA meeting during the last 25 years can remember Beth and Tom attending virtually every presentation at the meeting, presenting their scientific papers with enthusiasm, being active members of Council or the Editorial Board and also taking active part in all social events. For example, what would the Annual Auction have been without the presence of Tom and Beth?

The loss of these dear friends and colleagues is enormous at both the personal and professional levels. For many, the personal and professional relationships with Tom and Beth were one and the same because once we met them and worked with them, they instantly became our friends. This was not hard to imagine for those who knew them personally. They both shared that wonderful blend of being extremely committed to their work while simultaneously displaying a sense of respect and caring

for others and a sense of humor that made the world around them uplifting and positive. The extent to which Tom and Beth enriched the lives of WDA members in a personal way is inestimable. Their contributions to the betterment of wildlife, their co-workers, the WDA, and other organizations were immense.

Their interests and contributions went far beyond science. Tom and Beth were both good cooks. They loved good food, good wine (and bad whiskey!), good jokes, traveling, hunting, and fishing and reading. They contributed to many charitable organizations and gave freely of their time to worthy causes. For example, Beth was a board member of the American Heart Association of Wyoming.

Tom Thorne

Tom was 63. He completed a B.Sc. in zoology and a D.V.M. degree at Oklahoma State University, then joined the Wyoming Game and Fish Department in 1967. During his 35 plus years with the Department, Tom was Wildlife Research Veterinarian, Wildlife Veterinarian and Supervisor of Veterinary Services, Assistant Division Chief, and prior to his retirement in 2003, Acting Director. Tom was a wildlife disease specialist and a conservation biologist. Much of Tom's research was focused on health of bighorn sheep, pronghorn antelope, elk, mule deer, mountain lions, and black-footed ferrets. He was an author of more than 120 papers on these topics in journals, proceedings and books. In addition, Tom was the senior author of the 1982 revised version of the excellent compendium, "Diseases of Wildlife in Wyoming".

Tom was a mentor and advisor to numerous wildlife veterinarians and graduate students by providing career advice, guidance, support, and training in field techniques. Many of these people are now leaders in the WDA and the field of wildlife diseases.

Tom distinguished himself in many ways in the field of wildlife management including serving as committee member, chair, or coordinator of groups dealing with many major issues. He was an expert on brucellosis and contributed both his exceptional science and communication skills in advancing the understanding and management of the complex problems surrounding brucellosis in the Greater Yellowstone ecosystem and elsewhere.

Tom played a major role in recovery of the black-footed ferret. Following rediscovery of ferrets in the early 1980s, Tom coordinated the species survival plan for six years. This was a highly contentious program under a great deal of scrutiny. The program is credited with the short term survival of the black-footed ferret and its translocation into other natural habitats where, to this day, it continues to survive.

The governor of Wyoming spoke of Tom's contributions at the memorial service for Tom and Beth. He emphasized Tom's ability to bring together and encourage consensus among groups with dissenting views. Tom was a driving force behind the Wyoming Wildlife/Livestock Disease partnership, a partnership composed of academicians, state wildlife and livestock agency personnel, and other experts, that oversees more than \$1 million in funding for research projects on diseases at the interface between livestock and wildlife. The governor also praised Tom for presenting scientifically complex issues in a simple and persuasive language. Tom's approach empowered politicians and others to make decisions advantageous to wildlife. Tom fiercely and successfully defended keeping Wyoming free of game farming.

Tom contributed at the state, national, and international levels. He was a member of four specialist groups of the I.U.C.N. Species Survival Commission and a member for 10-20 years of four different committees of the U.S. Animal Health Association (USAHA). For many years, Tom was one of very few people who represented the perspectives of wildlife disease professionals at both the USAHA and the International Association of Fish and Wildlife Agencies. In 1979, Tom helped form and became the first Vice President of the American Association of Wildlife Veterinarians, a group he later guided as President.

Tom (and Beth) loved the WDA and served it with distinction. Tom was a member of the WDA by 1971. Over the years, he served on many committees some of which were the Student Activities Committee (Chair, 1987-88), Sections Committee (Chair, 1981-82), Time and Place Committee (Chair 1980-81), Awards Committee, and on the Public Awareness Committee on many occasions to which he provided his special perspectives acquired as a scientist working in a resource management agency. Tom was an elected Member-at-Large to the WDA Council from 1979 to 1982 and Vice President of the WDA from 1983 to 1985. He was a strong supporter of the Journal of Wildlife Diseases both through publishing papers in the Journal and also through serving on the Editorial Board from 1984 until his untimely death. Tom was the Chair of the organizing committee for a highly successful WDA meeting held in Laramie, Wyoming in 1981.

Tom brought a special enthusiasm with him to all WDA meetings that included good contributions from his research science, a keen interest in the science of others, and a special collegiality with other participants that served to emphasize the WDA as a family of people sharing a commitment to the betterment of wildlife and achievement of that goal by helping one another. In recognition of his contributions to the WDA, Tom received the Distinguished Service Award of the WDA in 1996.

Tom also worked very hard, but unsuccessfully, every year for many years at the Annual Meeting to be considered for the Duck Award. Ever persistent and ultimately successful, Tom finally received the Duck Award in Saskatoon in 2003 after a wonderful story with a fantastic dress that he bought at the auction for his wife Beth, who seldom wore dresses. And, yes, he wore it to the banquet!

Beth Williams

Beth was 53. She completed degrees in zoology at the University of Maryland (1972), veterinary medicine at Purdue University (1977), and a Ph.D. in veterinary pathology at Colorado State University (1981) on *Mycobacterium paratuberculosis* of wild ruminants. She received Board Certification from the American College of Veterinary Pathologists in 1983.

Beth began her career in the Department of Veterinary Sciences, University of Wyoming in 1982 and became full Professor in 1993. In addition, Beth was Adjunct Professor in the Department of Zoology and Physiology, University of Wyoming. She was the major professor on the committees of more than 35 M.Sc. students and 15 Ph.D. students in wildlife biology and management and the wildlife disease/pathobiology fields. Beth taught a wildlife diseases course and contributed to five additional courses at the University of Wyoming. In addition, Beth hosted, instructed and mentored more than 30 senior year veterinary student externs, including many who are current leaders in wildlife diseases.

Despite being an exceptional and award winning teacher, she is perhaps best known for her efficiency, accuracy and enthusiasm as a veterinary pathologist and wildlife researcher and for her prodigious contributions in these fields. Do any of us know anyone who worked as hard as Beth? Beth was an author of more than 116 papers in refereed journals, 24 chapters in books, more than 32 papers in published proceedings and as author or editor of 4 books. Beth's contributions were exceptional beyond the written word as demonstrated by the more than 55 invited presentations and more than 25 contributed papers she gave at conferences in the past five years alone.

Beth and colleagues were the first people to diagnose chronic wasting disease (CWD) as a spongiform encephalopathy and to delineate its occurrence in captive and free-ranging wildlife in Colorado and Wyoming, its only known distribution for many years. Beth continued her work with CWD. As CWD spread from captive and free-ranging cervids to other areas of the United States and Canada, the sound research and communication of that research by Beth and colleagues put her at the forefront of this contentious issue.

Beth was also well known for her work in identifying canine distemper as a major threat to black-footed ferrets and other mustelids, both free-ranging and in captivity. Her work with Tom was important to development of suitable protocols for protection of mustelids in captive breeding programs.

Beth was very well known for the breadth of her contributions across a great diversity of wildlife, a great diversity of ecosystems, and with a great diversity of parasitic and infectious organisms and pathologic conditions. Beth will be remembered as the ‘ultimate team player’. She, like Tom, was invariably inclusive and cooperative in assisting others. These characteristics are emphasized by her having co-authored papers with more than 215 colleagues.

Not surprisingly for one who worked so closely with colleagues, Beth contributed greatly to a wide variety of science organizations too numerous to mention. She was a founding member, Secretary-Treasurer, Vice President, President, and Newsletter Editor of the American Association of Wildlife Veterinarians and Vice President and President of the Western Conference of Veterinary Diagnostic Pathologists.

Beth’s contributions to the betterment of wildlife, to science, to her students and colleagues, and to a variety of science organizations were acknowledged with many awards.

Beth was fully committed to the WDA. She joined the WDA in or before 1978. She served on many committees including the Sections Committee, Student Activities Committee (Chair 1982-85), Editorial Search Committee, Nominations Committee, Public Awareness Committee (Chair 1993-95) and Budget and Audit Committee. She was elected Member-at-Large on Council for 1982 to 1985.

Beth served the Journal of Wildlife Diseases in many capacities, most recently as Editor from 2000 to her death. Other Journal-related commitments included Chair of the *ad hoc* Journal of Wildlife Diseases “On Line” Committee that ushered the Journal into the electronic age. She was an Assistant Editor and served on the Editorial Board of the Journal of Wildlife Diseases from 1987 to 2000. She was an author on more than 40 papers in the Journal of Wildlife Diseases. Beth was very active at our meetings and was the Program Chair for the 1981 meeting in Laramie. In 1996, Beth was awarded the Distinguished Service Award (DSA) of the WDA, the Association’s highest honor. The DSA is not presented every year and has rarely been presented to more than one individual in the same year. It is befitting that both Beth and Tom were acknowledged with this award in 1996, a symbol of their shared contributions and commitment to the Association that meant so much to them.

—*Ed Addison, Todd Cornish, Torsten Mörner, and Bill Samuel.*

A. Alan (Al) Kocan

The Wildlife Disease Association lost a dear friend and colleague when Alan Kocan suffered a heart attack and died on December 15, 2004. Al had been teaching at Ross University, St. Kitts, FWI. He was 58 years old.

Al was born and raised in Cleveland, Ohio. He graduated from Hiram College in 1968 and completed a M.S.P.H. and a Ph.D. in parasitology at the University of North Carolina by 1973. Following postdoctoral research at the University of North Carolina and Duke University in 1973-74, Al accepted a position in 1974 as Assistant Professor in the Department of Veterinary Microbiology, Parasitology, and Public Health at the Oklahoma State University College of Veterinary Medicine in Stillwater, Oklahoma. He would spend his entire career there. In the ensuing 30 years (the last 20 years as Professor), Al enriched the lives of innumerable students, friends and colleagues both in Stillwater and elsewhere. He was a visiting scientist in a number of locations including Alaska, Africa, and the West Indies.



Dr. Alan Kocan with his grandson Aidan

Al developed and taught a number of courses in parasitology and wildlife diseases at OSU. He taught veterinary protozoology and entomology for approximately 15 consecutive years. Al supervised 16 graduate students to 17 graduate degrees. He also contributed greatly to the local community through service upon numerous academic committees, a number of which he chaired.

Al's research interests in parasitology were diverse, but had a particular focus on ticks and tick-borne parasites and diseases. His work was well funded and well done as acknowledged by awards from his peers. Al authored or co-authored approximately 90 scientific research papers as well as more than 30 extension publications. These latter papers were typical of Al's willingness to take his science and expertise to the practical world. He was often asked for his expert opinion. He enjoyed this because Al liked people.

Al was a member of numerous scientific societies. We, in the Wildlife Disease Association (WDA), knew well of Al's well published work but that is not how we got to know him and how so many of us developed friendships with him. Al was a member of the WDA by at least 1971. He attended most annual meetings and, beginning in 1977, made a minimum of 16 scientific presentations in wildlife parasitology at these meetings. Al was our sixth Treasurer from 1985 to 1990 and he served on WDA committees. He was the driving force in the development and success of our educational aids program serving on the Educational Aids Committee for more than 10 years. He displayed patience, tenacity and a strong commitment to the development, promotion, and distribution of the slide sets used in talks and lectures. Al was co-editor of the 2nd edition of "Parasitic Diseases of Wild Mammals" (2001) and a co-author of two chapters in the book.

Al loved the outdoors, especially hunting and fishing with his boys. At the WDA meeting in Fort Collins in 1991 Al invited the 12-year-old son of another member up the Poudre Canyon to fish for trout and made his day. Al will be greatly missed.

—*Ed Addison, Bill Samuel, and Ken Waldrup.*

WDA ACTIVITIES

Wildlife Conservation Society Recognized as a WDA Sustaining Member. During their December telephone conference call WDA Council voted to recognize the Wildlife Conservation Society – Veterinary Field Program (WCS-VFP) as a Sustaining Member of WDA. Sustaining members are currently defined in the Bylaws as “Members having particular interest in the objectives of the Association and who wish to make a significant contribution as determined by Council in support of those objectives. Sustaining members receive all the rights and privileges accorded regular members and receive special recognition by the Association.” The WCS-FVP is the first organization so recognized since WDA redefined this membership category.

The WCS-FVP was begun in 1989 by Dr. William (Billy) Karesh and for several years staffed primarily by him. Subsequently a number of our WDA colleagues have joined him on the FVP team including Drs. Marcela Uhart, Steve Osofsky, Rodolfo Nallar Gutierrez, Mike Kock, Carolina Marull, Trish Reed, Alain Ondzie, Kathy Quigley, Martin Gilbert, Damien Joly, and Annelisa Kilbourn. Annelisa died in an airplane accident in Africa while on assignment with WCS-FVP in November of 2002 and Billy movingly told her story and connection with WDA at the 2003 annual meeting in Saskatoon.

The WCS Field Veterinary Program was established to address some of the health "problems" encountered by the conservation community. The program has grown to be more pro-active with priorities set on working with in-country wildlife experts, universities, government agencies, and NGO's from Patagonia to Central Africa. The FVP helps to create local training programs, conduct health investigations and surveillance programs, provide decision makers with mechanisms to make informed choices and policies, and compile guidelines to reduce disease transmission between wildlife, humans, and their domestic animals. Wildlife conservation is no longer one-dimensional, but a complex web of challenges surrounding wild animals, human communities, and domestic animals, increasingly sharing the same habitat and finite resources. The FVP uses a collaborative approach to address the complexities of protecting the health of animals and people. The concept appears to have caught on and support for the program has grown 30-fold since its inception.

In many developing countries, veterinarians and biologists lack the resources to develop field projects and the ability to interact with colleagues in wildlife health or expand their role in conservation. In response to this need, the FVP's Wildlife Health Fund offers assistance to exemplary individuals who demonstrate the potential to make significant contributions to wildlife health and conservation. Each year, this fund has provided veterinarians and researchers in less developed countries with financial and professional resources for projects ranging from primates in Colombia to ungulate diseases in Uganda to avian viruses in Peru. The FVP's Wildlife Health Fund also provides the funding for one-year memberships in the Wildlife Disease Association for interested scientists from developing countries. The goal is to link often isolated scientists with a professional association that provides an invaluable information resource as well as providing the opportunity for them to learn about the work of colleagues around the world. Since 2000, 234 individuals and institutions from 49 countries have been awarded WDA memberships through this effort!

With the WDA mission being to “acquire, disseminate and apply knowledge of the health and diseases of wild animals...”, it is easy to understand how the FVP shares the “particular interest in the objectives of the Association” and the contribution of the FVP in this regard has been exceptional.

—Dave Jessup

Cairns, 2005!! The 54th Annual Meeting of the WDA will take place in Cairns, Queensland, Australia, June 26 to July 1, 2005. The theme of the conference will be “Wildlife Health in a Shrinking World: Ecology, Management, and Conservation”. Symposia on the ecology of introduced wildlife diseases, and sessions on lessons learned from management of diseases in wildlife, the health of marine ecosystems, amphibian diseases and population declines, and wildlife health in the tropics (including studies on cassowaries, crocodiles, alligators, mahogany gliders, and tree kangaroos) will make this conference highly relevant in our rapidly changing world. The Australasian Section is excited to host this meeting and we promise a unique conference allowing you to experience the tropical Australian environment. Cairns is located in beautiful north Queensland. The conference will be held at the Colonial Club Resort, within a short walk to ancient rainforest, amazing mangroves, the tropical botanical gardens, and Cairns city. We will offer rainforest spotlighting trips to see nocturnal tree kangaroos, lemuroid possums, tree frogs, and more. You will learn about local conservation issues and a mid-week field day will offer the option of a rainforest or barrier reef excursion. Families are most welcome. The Australian Society of Veterinary Pathology annual conference will be held in Cairns the preceding week, to facilitate attendance at both meetings. **Deadline for early registration was February 28, 2005 and deadline for regular registration is May 30, 2005.** Details on the conference are available at <http://www.rainforest-crc.jcu.edu.au/events/conferences.htm>, or under “Meetings” on the WDA website at <http://www.wildlifedisease.org>. Contact: Lee Skerratt, School of Biomedical Sciences, James Cook University, Townsville, Australia 4811. Email: Lee.Skerratt@jcu.edu.au Ph : +61 (0)7 47814838, Fax: +61 (0)7 47791526.

WDA STUDENT ACTIVITIES

STUDENT AWARDS 2005

ATTENTION MENTORS AND ADVISORS! Please encourage your students to apply for WDA’s student awards. It’s time to start preparing for this year’s competition, which will take place in **Cairns, Australia!!** Each year, the WDA sponsors a competition for student awards. For 2005, students are encouraged to apply for the three awards. The WDA Student Awards Committee will judge the research and scholarship awards. Members of the attending audience at the 2005 WDA meeting will judge the Terry Amundsen Award. Criteria upon which each award is judged are available on the WDA website at the following URL:

http://www.wildlifedisease.org/Student/Student_Awards.htm

Wildlife Disease Graduate Student Research Recognition Award: DEADLINE: Applications must be ***received*** no later than **20 April, 2005**. This award is given to the student judged to have the best research project in the field of wildlife disease, based on written communication and scientific achievement. The winner receives a plaque and up to \$2000 US to cover travel, housing, registration, etc. related to the annual conference. The student will be the featured presenter during the Student Presentation Session at the conference.

Wildlife Disease Association Scholarship: DEADLINE: Applications must be ***received*** no later than **20 April, 2005**. This scholarship acknowledges outstanding academic and research accomplishment, commitment, and potential in pursuit of new knowledge in wildlife disease or health. The scholarship has a value of \$2000 US and is awarded annually to an outstanding student who is pursuing master’s or doctoral degree specializing in research on wildlife disease. To be considered, the candidate must have

completed a four-year baccalaureate degree. Candidates with an overall grade point average of 3.5 or above in 4.0 system or 80% or better in percentage system will receive priority. The candidate should be committed to leadership, scholarship, and service in the wildlife health profession.

Terry Amundsen Student Presentation Award: DEADLINE: WDA Meeting 2005. **Abstracts must be submitted by February 28, 2005!!** This award acknowledges outstanding oral presentation of research findings. Winner receives \$250.00 and a plaque. To be considered, the student must give an oral presentation (13-15 min) of their topic of choice to the WDA meeting participants in the special student session. Students wishing to be considered for the award should submit an abstract according to guidelines in the "Call for Papers" to the Program Chair of the Annual WDA Conference. A copy of the abstract also should be submitted to the Head of the Student Activities Committee, Dr. Todd Cornish, at the address below.

These awards are non-renewable and can be received only once by a given candidate. Applications for the Research and Scholarship Awards, must be submitted to: Dr. Todd Cornish, Wyoming State Veterinary Laboratory, University of Wyoming, 1174 Snowy Range Road, Laramie, WY 82070 (TCornish@uwyo.edu).

HAPPENINGS IN THE FIELD

USGS/National Wildlife Health Center's Quarterly Wildlife Mortality Report

Avian Botulism at Lower Klamath National Wildlife Refuge. In late July 2004, U.S. Fish and Wildlife Service (FWS) personnel reported the mortality of 5,000 birds at Lower Klamath NWR within the previous 10 days. Primarily dabbling ducks were affected, but some coots, grebes, and ibis also died. Sick birds showed signs consistent with botulism (resting head on back, lying at water's edge on mudflats or vegetative mats, sick and fresh dead birds clustered around maggot covered carcasses). Botulinum type C toxin was confirmed by mouse inoculation tests in ducks submitted to NWHC for diagnostic evaluation. There were approximately 200,000 resident and migrant waterfowl and 20,000 shorebirds at risk at the onset of the die-off and the number of birds increased as migratory birds arrived from the North over the next two months. Many of those birds were concentrated on a few wetlands where water was maintained despite an ongoing drought. Avian botulism has been a recurring problem at refuges in the Klamath Basin NWR Complex for many years. Refuge staff carry out aggressive surveillance and carcass pickup during the expected botulism season. Botulism has been confirmed or suspected at Lower Klamath NWR every year since 1980 with the exception of 1982, 1983, 1993, and 2002. Reported losses of birds during botulism outbreaks during that time period ranged from 300 to 14,000 birds.

Marine bird mortality in the eastern Aleutian Islands. A die-off of marine birds including puffins, gulls, kittiwakes, common eiders, and pelagic cormorants, and flat fish (flounder) was first observed in early July by residents of False Pass, Alaska on the extreme east end of the Aleutian Island chain. The weather at the time of the die-off was unusually warm (60 - 70 degrees F.) and sunny with light wind. The location is in a strait connecting the Bering Sea with the Pacific Ocean and there is a strong tidal current which carried the birds ashore. Specimens of dead birds were collected and frozen by Tribal government personnel then transferred to U.S Fish and Wildlife Service biologists at Izembek NWR who arranged shipment of the specimens to the NWHC for diagnostic evaluation. Dead carcasses continued to appear on the local beaches for two weeks with an estimated total mortality reaching 1,000 birds. Diagnostic evaluation of tufted puffins, a pelagic cormorant, and a black-legged kittiwake

showed birds were in fair body condition with some lung edema but had no other significant gross or microscopic lesions. Bacterial cultures of lungs yielded no pathogenic bacteria and viral cultures of brains, lungs, and intestines were negative. No significant parasite infections were observed in GI tracts. Upper GI contents and tissue samples were submitted to the Center for Marine Science at the University of North Carolina-Wilmington for marine biotoxin analysis, which determined the levels were within normal levels for marine birds. The NWHC has only three reported mortality events in tufted puffins since 1975. One event was in the Gulf of Alaska in 1989 and the other two events were on the Washington coast in 1991. The primary diagnosis in the Alaska and one Washington die-off was emaciation while the primary diagnosis in the second Washington die-off was suspect petroleum toxicosis.

Pelican and gull mortality in North Central nesting colonies. For the third consecutive year, there were higher than expected losses of pelican chicks in three nesting colonies in South Dakota, Montana and Minnesota. Losses ranged from 100's to 1000's. More than half of the North American white pelicans are produced in these colonies. A high number of pelicans necropsied from each site were positive for West Nile virus and some birds were also positive for Salmonella sp. or botulism type C. Histopathologic examinations are in progress to determine if West Nile virus was the cause of death in these pelicans. A two year research study is in progress in two of these states to determine the possible impact of West Nile virus on the nesting pelican colonies. Mortality was also reported in two gull nesting colonies in North Dakota. Salmonellosis was confirmed in some of the gulls submitted for necropsy from one colony. Similar gull mortality occurred in North Dakota nesting colonies for the past three years.

Terns in New England. In July and August 2004, staff and researchers at Seal Island National Wildlife Refuge (NWR) in Maine and staff at Monomoy NWR and Cape Cod National Seashore (NS) in Massachusetts reported sick and dead fledgling common terns. Seal Island terns were unable to raise or extend one wing, while those in Massachusetts were unable to fly and were circling, star-gazing, and unable to maintain their balance. At necropsy, the primary consistent finding was atrophy of immune system organs (thymus, bursa of Fabricius, spleen) in birds from all three sites. No viruses were isolated in multiple systems, and investigations are continuing to determine the cause of the immune organ atrophy. Many specimens from Massachusetts tested positive for *Salmonella typhimurium* (Copenhagen); these bacterial infections may be opportunistic due to immune system impairment. Mortality estimated from collected or buried tern carcasses was 1,700 in Massachusetts, making this the largest tern mortality event in the NWHC epizootic database.

Quarterly Wildlife Mortality Report
July 2004 to September 2004

State	Location	Dates	Species	Mortality	Diagnosis	Reported by
AK	False Pass	07/01/04-07/18/04	Tufted Puffin Pelagic Cormorant Black-Legged Kittiwake	1,000 (e)	Open	NW
AK	Kenai NWR	07/01/04-07/24/04	Wood Frog	25	Parasitism: Perkinsus-like organism	NW
AK	Yukon Delta NWR	07/01/04-07/05/04	Wood Frog	3	Parasitism: Perkinsus-like organism	NW
AZ	Pima County, Altar Valley	05/01/04-06/15/04	Tiger Salamander	4 (e)	Open Parasitism: <i>Clinostomum</i> sp.	NW
CA	Alameda Naval Air	06/04/04-07/25/04	California Least Tern	159 (e)	Open	NW

CA	Station Delevan NWR and Sacramento NWR	07/25/04-10/18/04	Shoveler Mallard Green-Winged Teal American Wigeon Pintail	1,606 (e)	Botulism type C	NW
CA	Lower Klamath NWR	07/20/04-09/16/04	Mallard Pintail Green-Winged Teal Gadwall American Coot	9,226	Botulism type C	NW
CA	Pacific coast	07/01/04-09/01/04	California Brown Pelican	53	Emaciation Starvation	NW, SWD
CA	Sonny Bono Salton Sea NWR	06/25/04-09/30/04	California Brown Pelican Great Blue Heron Caspian Tern Eared Grebe California Gull	49	Botulism type C	NW
DE	Kent County	07/15/04-07/20/04	Barn Owl	6 (e)	Emaciation	NW
FL	Manatee County	07/01/04-ongoing	Wood Stork White Ibis Roseate Spoonbill Great Blue Heron Unidentified Pelican	20 (e)	Open	FL, NW, NFL
GA	Cobb County	06/10/04-06/13/04	Domestic Duck	11	Open	SCW
GA	Hall County	07/27/04-07/30/04	Mallard	5	Septicemia	SCW
GA	Marion County	06/10/04-06/23/04	Domestic Mallard Mourning Dove European Starling Brown-Headed Cowbird	22 (e)	Salmonellosis Salmonellosis suspect	SCW
IA	Jackson County	06/28/04-07/05/04	Little Brown Bat Big Brown Bat	50 (e)	Open	IA
IL	Multiple Counties	07/20/04-ongoing	White-Tailed Deer	34 (e)	Epizootic hemorrhagic disease	IL
LA	Iberia County	08/15/04-08/27/04	Wood Duck	13 ^{pr}	Avian pox suspect	LA
MA	Barnstable County	08/08/04-08/25/04	Common Tern	20 (e)	Viral Infection: Unidentified Salmonellosis	NW
MA	Monomoy NWR	07/21/04-08/25/04	Common Tern Laughing Gull Great Black-Backed Gull	2,575 (e)	Viral Infection: Unidentified Salmonellosis	NW
MD	Talbot County	09/23/04-ongoing	Roseate Tern Unidentified Sandpiper Mallard Shoveler Lesser Yellowlegs Green-Winged Teal	250 (e)	Botulism type C	MD, NW
ME	Seal Island NWR	07/28/04-08/25/04	Common Tern Arctic Tern	40 (e)	Viral Infection: Unidentified	NW
MS	Mississippi Sandhill Crane NWR	09/24/04-09/27/04	Mississippi Sandhill Crane	4	Open	NFL, NW
MT	Medicine Lake NWR	07/02/04-08/16/04	American White Pelican	200 (e)	Viral Infection West Nile Salmonellosis Botulism type C	NW
ND	Logan County, Kulm WMD	07/15/04-08/11/04	Franklin's Gull	75 (e)	Open	NW
ND	McIntosh County	09/11/04-10/20/04	Shoveler Unidentified Gull Mallard Gadwall American White Pelican	100 (e)	Botulism type C	NW
ND	Logan County	07/01/04-08/12/04	Ring-Billed Gull Franklin's Gull Canada Goose Unidentified Shorebird Double-Crested Cormorant	2,300 (e)	Salmonellosis Open	NW
NM	Bernalillo County	08/23/04-08/30/04	Wood Duck	10 (e)	Botulism type C	NW

NY	Jefferson County	06/01/04-06/02/04	Canada Goose	9	Toxicosis: diazinon	NY
OH	Ottawa County	08/09/04-08/10/04	Bank Swallow	100 (e)	Trauma Open	NW
ONT	Lake Ontario, Canada	08/21/04-ongoing	Long-tailed Duck Double Crested Cormorant Herring Gull Common Loon Ring-billed Gull	600 (e)	Botulism type E	TOR
OR	Klamath County	07/15/04-08/17/04	Unidentified Rail Eared Grebe American Coot Green-Winged Teal Shoveler	800 (e)	Botulism type C	NW
OR	Lane County	06/30/04-08/20/04	Mallard Western Canada Goose	78	Toxicosis: blue-green algae suspect	AL, NW
PA	Presque Isle State Park	06/18/04-ongoing	Unidentified Cormorant Common Loon Herring Gull Black-Backed Gull Ring-Billed Gull	500 (e)	Botulism type E Emaciation	NW, CCW
RI	Newport County	06/15/04-07/10/04	Northern Leopard Frog	110 (e)	Viral Infection: Ranavirus	NW
SD	Lacreek NWR	08/16/04-09/15/04	American White Pelican	35 (e)	Open	NW
SD	Brule County	07/01/04-08/03/04	Unidentified Pelican Ring-Billed Gull Gadwall Unidentified Duck Redhead	300 (e)	Botulism (not typed) Open	NW
SD	Waubay NWR	06/29/04-08/23/04	American White Pelican	200 (e)	Viral Infection: West Nile Salmonellosis Botulism type C	NW
UT	Davis County	08/15/04-09/30/04	Shoveler Green-Winged Teal Pintail California Gull American Avocet	2,500 (e)	Botulism type C	NW
WA	Grant County	09/21/04-09/25/04	Bullfrog	200 (e)	Open	NW
WA	King County	08/12/04-09/23/04	American (Common) Crow	16	Enteritis Viral Infection: Reovirus Avian Pox	NW
WA	Ridgefield NWR	09/19/04-10/08/04	Barn Swallow Violet-Green Swallow	95 (e)	Emaciation	NW
WI	Milwaukee County	09/07/04-09/16/04	Mallard Canada Goose	60 (e)	Botulism type C	NW
WI	La Crosse County	07/03/04-08/01/04	Eastern Bluebird	13	Open	NW
WI	La Crosse County	07/22/04-08/10/04	Mallard	10	Open: botulism suspect	NW
WI	La Crosse County Lesser Scaup	09/25/04-ongoing	American Coot Mallard Shoveler Gadwall	417 (e)	Parasitism: <i>Cyathocotyle bushiensis</i> Parasitism: <i>Sphaeridiotrema globules</i> Parasitism: trematodiasis	NW
WI	Vilas County	07/01/04-07/22/04	Bullfrog	100 (e)	Open	NW
WI	Winnebago County	09/12/04-09/25/04	Mallard	40 (e)	Botulism Type C	NW, WI
WY	Grand Teton National Park	07/09/04-08/31/04	Columbia Spotted Frog	10 (e)	Open	NW
<u>Updates/Corrections</u>						
AL	Wheeler NWR	05/18/04-05/27/04	Southern Leopard Frog	150 (e)	Parasitism: trematodiasis	NW
CA	Inyo County	05/01/03-09/30/03	Ring-Billed Gull	22	Toxicosis: salt suspect	CDL

					Parasitism Emaciation	
FL	Jefferson County	02/29/04-05/20/04	Northern Cardinal Bobwhite Quail	5 (e)	Open	FL
FL	Pinella County	05/11/04-06/12/04	Mallard Muscovy American Coot Unidentified Cormorant Unidentified Fish	80 (e)	Open: botulism suspect	FL
IL	Winnebago County	06/27/04-06/28/04	Little Brown Bat	50 (e)	Emaciation: Weather Conditions suspect	NW
KY	Rockcastle County	04/20/04-05/10/04	Jefferson Salamander Marbled Salamander Wood Frog Eastern Red-Spotted Newt Green Frog	500 (e)	Viral Infection: Iridovirus Fungal Infection: Unidentified	NW
MA	Barnstable County	05/04/04-06/08/04	Common Eider	350 (e)	Parasitism: acanthocephali asis	NW
MN	Isanti County	06/02/04-06/08/04	Wood Frog	10000 (e)	Viral Infection: Ranavirus	NW
MN	Lac Qui Parle WMA	05/30/04-08/01/04	American White Pelican	930 (e)	Viral Infection: West Nile Open Botulism type E	NW
MN	Lake of the Woods County	06/17/04-07/01/04	American White Pelican Ring-Billed Gull Double-Crested Cormorant	82 (e)	Open	NW
MS	Harrison County	02/10/04-05/30/04	Bullfrog Southern Leopard Frog	30	Parasitism: Perkinsus-like organism	NW
US	All continental states except DC, MD, NC, and WA	01/02/04-ongoing	American (Common) Crow Western Scrub Jay Yellow-Billed Magpie Steller's Jay Blue Jay	6,136 (e)	Viral Infection: West Nile	CDC, NW, ST

(e) = estimate; † = morbidity, not mortality

New York State Dept. of Environmental Conservation (NY), Southeastern Cooperative Wildlife Disease Study (SCW), USGS National Wildlife Health Center (NW), Wisconsin Dept. of Natural Resources (WI), Centers for Disease Control and Prevention (CDC), Various states labsites (ST), Alabama Veterinary Diagnostic Laboratory – Auburn (AL), Environment Ministry Laboratory of Toronto (TOR), Florida Fish and Wildlife Conservation Commission (FL), San Diego County Veterinary Diagnostic Laboratory (CDL), Sea World of San Diego

(SWD), Iowa Department of Natural Resources (IA), Illinois Department of Natural Resources (IL), Louisiana Department of Wildlife and Fisheries (LA), Maryland Department of Natural Resources (MD), Ashland National Forensics Laboratory (NFL).

Written and compiled by Rex Sohn -Western US, Kathryn Converse- Central US, Grace McLaughlin - Eastern US, NWHC . The Quarterly Wildlife Mortality Report is available at <http://www.nwhc.usgs.gov>. To report mortality or receive information about this report, contact the above NWHC staff, or for Hawaiian Islands contact Thierry Work. Phone: (608) 270-2400, FAX: (608) 270-2415 or e-mail: kathy_converse@usgs.gov. USGS National Wildlife Health Center, 6006 Schroeder Road, Madison, WI 53711.

WDA SECTION NEWS

NEWS FROM THE AUSTRALASIAN SECTION

In August I was fortunate enough to have the opportunity to travel to San Diego, California to attend the combined American Association of Zoo Veterinarians/Wildlife Disease Association/American Association of Wildlife Veterinarians annual conference. With over 900 delegates from over 32 countries there was a truly international feel to the event and ample scope to

meet new colleagues and gain an appreciation for the diversity of issues pertaining to wildlife disease and health in the free ranging and captive setting. A strong recurrent theme in papers presented by WDA members was the interplay between humans, wildlife, disease, and ecosystem health with examples from around the world. The current pressure caused by a rapidly expanding human population in southern California on arid land environments and species was highlighted with an entire session devoted to the work being undertaken in this region.

I attended several WDA council meetings through the course of the week and was consequently able to have input into the current round of revisions to the constitution and bylaws. Under Torsten Morner's guidance the Association is moving towards a truly international association and the need for the organisation to shift somewhat from its current North American focus was discussed at length. This matter will be discussed further this month when council again meets via teleconference. This move will have ramifications for the Australasian section and it will become necessary for all members of the Australasian section to become parent body members. For 2005 at least membership dues will be paid to the Australasian section but over the course of the next year we can expect dues to be again paid to the parent body. At present only a handful of people are members of the parent body and if further people opt to no longer pay parent body dues we will eventually lose the right to exist as a geographic section. The need to make the journal more international and hence more relevant to members worldwide was considered as part of this and the possibility of again appointing an Australasian section member on the editorial board was raised. If anyone has an interest in this role please contact me and we can discuss ways in which we can progress this notion. I would also encourage all members to consider the journal when publishing work as if we, as a section, feel that the journal is not relevant to us then the only way that we can make it relevant is by contributing papers ourselves. The journal is now available online (www.jwildlifedis.org) free until the start of next year when access will be limited to members of the parent body (Excerpt from President's Message).

—Tim Porta, President Australasian WDA

NEWS FROM THE EUROPEAN SECTION

Visit the EWDA website at www.ewda.org and find information on conferences, members' interests, publications, and lots more.

The 6th Conference of the European Wildlife Disease Association (EWDA), CWD and TSE Workshop was held 8-12th September 2004 at the National Veterinary Institute, Uppsala, Sweden. The conference was attended by 121 delegates from 19 European countries and also included speakers from the USA, Canada, and South Africa. The conference themes were CWD/TSEs, Bovine Tuberculosis, emerging infectious diseases including SARS and Avian Influenza, and disease interactions between predators and prey species. The sessions covered a wide range of subjects including zoonotic diseases and emerging diseases of wildlife. For more details on this meeting, please visit the EWDA website.

Obliterative Endophlebitis in Mute Swans (*Cygnus olor*) Caused by *Trichobilharzia* sp. (Digenea: Schistosomatidae) Infection

G. H. VAN BOLHUIS, J. M. RIJKS, G. M. DORRESTEIN, J. RUDOLFOVA, M. VAN DIJK, AND T. KUIKEN Schistosome infections in mammals cause chronic proliferative vascular lesions associated with the presence of adult parasites in the lumen of mesenteric and portal veins. In birds, however, this has never been reported. In this study, we found obliterative endophlebitis associated with the presence of adult schistosomes (*Trichobilharzia* sp., probably *Trichobilharzia filiformis*) as the main pathologic finding in five of eight mute swans (*Cygnus olor*). On histologic examination, the

intestinal and portal veins of these swans showed moderate to severe, diffuse, hyperplastic endophlebitis, characterised by myointimal hyperplasia, often with obliteration of the vascular lumen. In addition, moderate to severe lymphocytic and granulocytic enteritis occurred in all eight swans associated with the presence of schistosome eggs in the intestinal mucosa. Other findings included hepatic and splenic hemosiderosis and high hepatic copper levels. The vascular lesions associated with *Trichobilharzia* sp. infection may have contributed to the emaciation and death of those mute swans by obstruction of venous return in the intestinal and portal veins.

Reference - van Bolhuis. G. H. and others (2004) *Veterinary Pathol.* **41**, 658-665.

Contact for correspondence, Dr T. Kuiken *Email-* t.kuiken@erasmusmc.nl

Rodenticide poisoning in red kites (*Milvus milvus*). Reintroduction of red kites has been ongoing in the UK since 1989. Over the past few years for example, 20 red kites were released in 2004, 11 in 2003 and 22 in 2002. Although the species is slowly recovering in numbers and released birds are doing well, a review of post-mortem examinations of red kites found dead and submitted to the Institute of Zoology (Zoological Society of London) from 1999 - 2004 has revealed that a common cause of death since 1999 is anti-coagulant rodenticide poisoning (ARP). ARP accounted for death in 16% of the total cases examined (n = 56) and 29% of those where a cause of death has been determined (n=31). Rodenticide use clearly represents a threat to red kites through consumption of poisoned rodents, as ARP related mortality remains high despite the gradual increase in numbers. English Nature and the Royal Society for the Protection of Birds have published a leaflet setting out measures that can be taken to reduce the risk to red kites and other birds of prey from anti-coagulant rodenticides, and an industry initiative has been launched which aims to reduce the risk of secondary poisoning by encouraging safe use of rodenticide poisons.

-Iain McGill, Tony Sainsbury, Ann Pocknell, Institute of Zoology/Zoological Society of London, Regent's Park, London, UK, NW1 4RY,

-Ian Carter, English Nature, Northminster House, Peterborough, UK, PE1 1UA

NEW! Sign up to the EWDA Discussion E-list. Dear JWD readers, I would like to introduce the EWDA discussion E-list, launched last September. EWDA discussion E-list is a mailing list moderated by the EWDA student representative. Its primary goal is to discuss and diffuse information and news, debates, conference and workshop announcements, and job and education opportunities, related to wildlife disease research and surveillance. It is open to students and non-students, EWDA members and non-members, to create a bridge between graduate students, post-doctorates, and established researchers, sharing the same interests. You are all invited to step inside and subscribe to this forum for discussion, by simply sending an email without subject or body to: EWDA_discussion_subscribe@yahoo.com. Directly reply to the confirmation email, or choose the "join the mailing list" option when clicking on the proposed link. If you have any questions, suggestions, or requests, or if you have difficulties with subscribing, please, keep me informed. Looking forward to hearing from you on the list.

—EWDA Student Representative, Leslie A. Reperant (l.reperant@vet-lyon.fr).

NEWS FROM THE NORDIC SECTION

Just to point out that the situation of prey and predator is not always as we expect it to be, we here present a collection of three cases from the Nordic countries where the predator becomes the victim:

Mother moose strikes back! The Finnish wolf (*Canis lupus*) population is small (ca. 150 individuals) but slowly increasing and doing well especially in the eastern part of the country. Wolf packs prey

mainly on moose, in Europe called elk (*Alces alces*), which is a common cervid species in the whole country.

On October 1st of 2004 the researchers of RKTL (Finnish Game and Fisheries Research Institute) submitted one of their radio-collared wolves for post mortem investigation to EELA (National Food and Veterinary Research Institute). The wolf had been found dead near a carcass of a moose calf and it had probably been there for several days. No external wounds or other injuries were visible. The researchers were concerned of a possible violation of animal welfare, conservation or hunting legislation, as there had been a recent case of deliberate wolf poisoning nearby.

The dead wolf was an old female, and she had given birth to a litter this spring. The necropsy revealed a large subcutaneous haemorrhage on the right side of the chest and two fractured ribs (10th and 11th) beneath the haemorrhage. The intercostal muscles between these two ribs were torn and there was a large amount of free blood together with large blood clots in the thoracic cavity. Otherwise the wolf appeared normal, although it was not in a very good nutritional status. The stomach was completely empty. It was concluded that the cause of death was the traumatic injury to the chest.

Based on the post mortem findings and background information, it seemed most likely that the wolf was kicked in the chest by a female moose defending herself and her calf. The moose is well known for being able to efficiently use the front hooves against attackers. According to Finnish wolf biologists, this is the first plausibly verified case of a moose killing a wolf in Finland. Interestingly, this wolf also had two old and healed rib fractures on the right side, just in front of the freshly fractured ribs. As an old and experienced member of the wolf pack, she had probably been in the same situation before, but this time didn't come out as a winner.

—Case presented by Marja Isomursu, VMD, EELA, Oulu, Finland

In Sweden the wolf population is slightly smaller than in Finland. Moose is also the favoured prey in Sweden. In January 2001 a one-year-old female wolf was found dead. At the site there was blood and moose hairs, and tracks from an adult moose leaving at a gallop together with one calf. There was blood in the calf tracks for about 300 meters, after which the bleeding had ceased.

At necropsy of the wolf, two ribs (nr 6 and 11) on the right side were found to be fractured, and large amounts of free blood was found in the abdomen. No other pathologic changes were found. The wolf was in a good body condition and the stomach contained large amounts of moose hairs.

We have as a third case, previously mentioned in the JWD supplement, the young Lynx (*Lynx lynx*) that was found dead beside a dead roe deer (*Capreolus capreolus*). Deliberate poisoning of the lynx was suspected at first. But the necropsy showed that the lynx had died of a fractured cervical vertebra, and from the necropsy findings and the tracks in the snow at the find site it was concluded that it could only have been a violent kick from the roe deer that caused the mortality.

—Erik Ågren, VMD, Nat Vet Inst, Dept of Wildlife, Uppsala, Sweden.

WDA SECTION CHAIRS AND CONTACT INFORMATION

African Section. For information regarding the African Section, contact Elizabeth Wambwa, Kenya Wildlife Service, P.O. Box 40241, Nairobi, Kenya. Telephone: 254-2-504180; Fax: 254-2-505866; email: ewambwa@yahoo.com

Australasian Section. For information regarding the Australasian Section, contact Tim Portas, Western Plains Zoo, P.O. Box 831, Dubbo, NSW 2830, Australia. Phone: 61 2 6881 1460; Fax: 61 2 6884 1496; email: tportas@zoo.nsw.gov.au.

European Section. For information regarding the European Section, contact Marc Artois, ENVL, Unite Pathologie Infectieuse, BP83, 69280 Marcy l'Etoile, France, Telephone: 33-487-87-27-74, email: m.artois@fvvet-lyon.fr.

Nordic Section. For information regarding the Nordic Section, contact Eric Agren, Department of Wildlife, National Veterinary Institute, SE-751 89 Uppsala, SWEDEN, Phone +46 18 67 40 00 Fax +46 18 30 91 62 or E-mail: Erik.Agren@sva.se.

Wildlife Veterinarian Section. For information regarding the Wildlife Veterinarian Section, contact Dave Jessup, California Department of Fish and Game, 1451 Shaffer Rd., Santa Cruz, CA 95060, USA. Telephone: 831-469-1726, email: djessup@ospr.dfg.ca.gov.

JOB ANNOUNCEMENTS

Visit the JWD website at <http://www.wildlifedisease.org/Jobs.htm> for up to date job listings.

TRAINING/EDUCATIONAL OPPORTUNITIES

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

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 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 Fwy., Dallas, Texas 75203-2996.

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.

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.

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.

MEETING AND CONFERENCE ANNOUNCEMENTS

Visit the JWD website at <http://www.wildlifedisease.org> for more conference listings.

54th Annual Meeting of the Wildlife Disease Association. 26 June to 1 July 2005. The 54th Annual Meeting of the WDA will take place in Cairns, Queensland, Australia, June 26 to July 1, 2005. See **WDA ACTIVITIES** in this issue. **Deadline for early registration was February 28, 2005 and deadline for regular registration is May 30, 2005!** Details on the conference are available at <http://www.rainforest-crc.jcu.edu.au/events/conferences.htm>, or under "Meetings" on the WDA website at <http://www.wildlifedisease.org>. Contact: Lee Skerratt, School of Biomedical Sciences, James Cook University, Townsville, Australia 4811, Email: Lee.Skerratt@jcu.edu.au, Ph : +61 (0)7 47814838, Fax: +61 (0)7 47791526.

2nd International Chronic Wasting Disease Conference. July 12-14, 2005. The 2nd International Chronic Wasting Disease Conference will be held July 12-14, 2005 at the Monona Terrace Convention Center, Madison, Wisconsin, USA. Sponsors of this meeting are Wisconsin Department of Natural Resources, USGS National Wildlife Health Center, and USDA-APHIS Veterinary Services. The symposium will include plenary sessions, concurrent sessions, and panel discussions on current topics important to understanding and managing CWD in free-ranging and farmed cervids. There will also be a poster session. Field trips will be offered. Sessions include State and Provincial CWD Management Update; Biology of Prions; TSE Diagnostics; Environmental Contamination, Disposal & Disinfection;

Management and Control of CWD; Regulatory Agencies and CWD; Human Dimensions of CWD; Ecology and Epidemiology of CWD; CWD Policy and Administration; and CWD and Other Species. Additional information, including a Title/Abstract Submission Form, is available from the CWD Alliance at <<http://cwd-info.org>> and the Wisconsin Department of Natural Resources at <<http://dnr.wi.gov/org/land/wildlife/whealth/issues/CWD/conference.htm>>. Completed Title/Abstract Submission Forms should be forwarded to CWDSymp@usgs.gov. The deadline for title/abstract submission was March 15, 2005.

27th Congress of the International Union of Game Biologists (IUGB). 28 August-3 September 2005. The German Union of Game and Wildlife Biologists and the Institute of Wildlife Research at the School of Veterinary Medicine Hannover announce the 27th Congress of the IUGB to be held in Hannover, Germany, from 28 August to 3 September 2005. Wildlife researchers, wildlife managers, ecologists, conservationists, and veterinary and agricultural scientists worldwide are invited to share their knowledge and present their latest research. Main topics are as follows: habitat networks for large wildlife and habitat fragmentation; wildlife in urban areas; small game and predation; wildlife diseases; wildlife ecotoxicology; sustainable use, population assessment; and biomonitoring. More information contact Anne Strattner, Institute of Wildlife Research, School of Veterinary Medicine Hannover, Bischofsholer Damm, 30173 Hannover, Germany, T: +49-511-856-7360, E: Info@IUGB-2005.de Homepage: <http://www.iugb-2005.de>

Joint Conference of The American Association of Zoo Veterinarians and the American Association of Wildlife Veterinarians. October 14-21, 2005. The American Association of Zoo Veterinarians and the American Association of Wildlife Veterinarians will be holding a joint conference in Omaha, NE October 14-21, 2005. Topics for sessions will include: Nutrition; Health Issues Associated with Mixed Species and Complex Exhibits; Preventative Medicine/Reproduction and Contraception; Legislative and Regulatory Issues; Hoofstock, Carnivores, and Small Mammals; Herps/Invertebrates/Aquatics; Avians; Primates; Case Reports; Conservation Projects in your Backyard and Conservation Updates; Guidelines for Veterinarians Working Abroad and Reports from the Field; Wildlife Epidemiology using Remote Imaging and Sensing Technologies; Anesthesia; and Emerging and Zoonotic Diseases of Captive and Free-ranging Wildlife. Those wishing to submit a title to be considered for presentation at this joint annual meeting are asked to complete the submission form that is available on the AAZV website and e-mail, mail, or fax completed forms to the appropriate session chair. For additional conference information, and for list of session chairs, please visit the AAZV website at <http://www.aazv.org>. Deadline for submission of titles to session chairs was March 16, 2005.

Note from the Editor:

Send any items such as reports, meeting announcements, diagnostic riddles, position and grant announcements, or anything else deemed appropriate for the Supplement to the Journal of Wildlife Diseases or the WDA website, to Pauline Nol (Supplement Editor) at USDA/APHIS, National Wildlife Research Center, 4101 LaPorte Avenue, Fort Collins, CO 80521 USA, Ph: (970) 266-6126, Fax: (970) 266- 6157, Email: pauline.nol@aphis.usda.gov, or Michael Ziccardi (Website Editor) at Wildlife Health Center, University of California, Davis, CA, 95616, USA, Ph: (530) 754-5701, Fax: (530) 752-3318, Email: mhziccardi@ucdavis.edu. Files in Microsoft Word sent electronically or via disk are preferred, though submissions in any form are welcome.