



# ***SUPPLEMENT TO THE JOURNAL OF WILDLIFE DISEASES***

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

**Pauline Nol, Editor**

USGS/National Wildlife Health Center  
6006 Schroeder Rd.  
Madison, WI USA 53711  
Telephone: 608-270-2489  
E-mail: pauline\_nol@usgs.gov

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

## **President's Corner**

So, just how does all this work, anyway? For many, if not most WDA members, an understanding of how our Association “gets things done” is poorly understood. The fact that the Association successfully produces its quarterly scientific journal (JWD) and Supplement, orchestrates an Annual Conference, administers Association finances, promotes the organization in a myriad of ways, etc. is observable, however the means by which these things are accomplished are not clear in the minds of many.

First and foremost, the foundation of WDA's success is its membership. In other words, YOU! Your direct involvement over the years has resulted in the establishment of our Constitution and Bylaws and the election of officers and members of our governing Council. You have chaired and served on numerous standing and ad hoc committees, edited and facilitated the production of our outstanding journal, and worked tirelessly to insure the success of our annual conferences. Again, the members and volunteers serve as the foundation for “getting it done” within our Association.

Detail: WDA is a tax exempt, professional association, incorporated in the State of Illinois. This designation is subject to annual review and renewal. The Association maintains liability insurance to protect its officers serving in voluntary capacities.

Among the less well understood aspects of the functioning of our Association is the relationship with its publisher and business partner, in our case, Allen Press (AP), Inc. and Allen Marketing and Management (AM&M), a division of AP. Our relationship with AP as our “business manager” began in 1993. Every two years the WDA President, on behalf of the Association, enters into a formal written contract with our business partner, AM&M. The contract identifies the complete scope of our management agreement. Details relating to management services such as data management, monetary services, renewal agreements, provision of standard and special reports, and other business services are integral to the contract. It also outlines financial compensation to be paid by WDA for services provided.

In addition to our relationship with AP/AM&M, WDA also has an established relationship with Buttonwood Partners, Inc.. They serve as the manager of WDA's investment portfolio, which, among other things provides for the safeguarding of Association contingency funds, etc. Council regularly reviews investment strategies, reviews annual audits, and provides administrative oversight of this aspect of our business.

With the encouragement of Council at its July 2002 meeting in Arcata, CA, three members (President, immediate Past President, and Treasurer) arranged for a two day visit, in early November, to our business offices in Lawrence, Kansas. The objectives were to review, in detail, our current contract; assess the level and quality of services provided as they relate to costs incurred; review, clarify, and modify (if appropriate) existing elements of accounting and reporting formats; and investigate the potential for modifications to future contracts which would benefit our Association, its administration, and the membership at large. An obvious spin off of the visit would be the strengthening of WDA's relationship with its business partner through face to face interaction.

The Wildlife Disease Association does not regard the Supplement to the Journal of Wildlife Diseases (Wildlife Diseases Newsletter) as a citable publication and, therefore, it should not be referenced in the scientific literature.



FIGURE 1. Dr. Anne Fairbrother being presented the 2002 WDA Distinguished Service Award by WDA president, Dr. Paul Barrows.

During the visit, working breakfast and lunch's were employed to maximize productive time. We interacted directly with those responsible for all elements of WDA's publication and business requirements. Additionally, we had the opportunity to observe AP's production, storage, and distribution facilities, as well as the administrative offices required to serve the needs of the nearly 400 employees required to accomplish daily business.

The resultant interactions were positive in all regards. Our meetings were informative, enlightening, and exceptionally useful. From our perspective WDA clearly appears to be receiving excellent value in regard to services, assistance, and guidance provided. Our overall impression was one of a well managed organization composed of quality individuals who desire to do the best possible job for WDA. Many new and innovative ideas were discussed that could well result in considerable benefit for WDA members in the future. Mutual task lists were developed for subsequent action by all participants. You may wish to check out [www.AllenPress.com](http://www.AllenPress.com) for additional information. Prospects for positive enhancements in the future look very good!

So, this is how "some of this stuff works" and "how some things get done"! I encourage you to become part of the process. Volunteer to run for office, or to serve as a Committee member or chair. Promote WDA among your colleagues. And please, plan to attend what will most certainly be a wonderful WDA Annual Conference in Saskatoon, Saskatchewan, August, 2003.

*Paul L. Barrows, WDA President*

## WDA ACTIVITIES

**Dr. Anne Fairbrother Presented the 2002 Distinguished Service Award.** Dr. Paul Barrows was able to take the opportunity to present Dr. Anne Fairbrother with this year's WDA Distinguished Service Award at the AVMA's Committee on Environmental Issues (CEI) meeting in October. Dr. Fairbrother received her D.V.M. in 1980 at the University of California at Davis and her M.S. and Ph.D. in Veterinary Science in 1982 and 1985 respectively, at the University of Wisconsin-Madison. She has served many years in both the public and private sector as a world's leading expert in ecotoxicology and is currently Chief of the Ecosystems Characterization Branch of EPA's National Health and Environmental Effects Research Laboratory.

Dr. Fairbrother's service and commitment to WDA has been particularly notable. In 1987, she was elected as a Council Member at Large and remained a Council member for the next 12 years in various positions, including Treasurer, Vice President, President and Past President. She has also hosted an annual WDA meeting in Corvallis Oregon in 1989 and served as an Assistant Editor for the *Journal of Wildlife Diseases* from 1986-1991. She currently acts as advisor to WDA on the budget and audit committee and continues to serve on the editorial board of *JWD*.

Dr. Fairbrother's dedication and contribution to the knowledge of wildlife health and wildlife conservation is exemplary. The WDA has benefited considerably from Dr. Fairbrother's affiliation and outstanding commitment, both to her work and to our Association. The Distinguished Service Award is a well-deserved and very fitting tribute.



FIGURE 2. Dr. Fairbrother displaying her much-deserved award.

**52nd Annual Meeting of the Wildlife Disease Association. August 11–14, 2003; Saskatoon, Saskatchewan, Canada.** The 52nd annual scientific meeting of the Wildlife Disease Association will be held in Saskatoon, SK on August 11th to 14th, 2003. The conference will consist of presentations and posters on all aspects of wild animal diseases world-wide. In addition to the WDA Conference itself, the American College of Zoological Medicine will offer a one-day training course on the preceding Sunday (August 10th) and an International Workshop on Chronic Wasting Disease will be held on the following Friday (August 15th). Saskatchewan offers exceptional opportunities for outdoor recreation and wilderness experiences for those who may wish to spend some holiday time before or after the conference. The conference venue is the Delta Bessborough Hotel at riverside in downtown Saskatoon. Dormitory-style housing also will be available at the University of Saskatchewan, a 20 minute walk away. The conference is being hosted by the Canadian Cooperative Wildlife Health Centre. For full information on registration, housing, costs and vacation opportunities for the conference and the associated events, visit the 52nd WDA Conference Web Site starting in January 2003 (<http://wildlife.usask.ca/WDA2003>).

**Call for Papers.** Requests to contribute a paper or poster at the 2003 WDA Conference in Saskatoon, August 11–14, as well as accompanying abstracts, should be received no later than May 5, 2003. Please send the abstract via e-mail to the program chair at: [gary.wobeser@usask.ca](mailto:gary.wobeser@usask.ca). If electronic mailing is not possible, please send a copy of your abstract in ASCII format on a computer diskette, along with your printed copy to the program chair at the address below. Please include the names and complete addresses of all authors on the abstract and underline the name of the person who will present the paper. Abstracts should follow the format of the attached sample abstract and be in 12 point font. Abstracts must be no longer than 2 full pages, including title, authors and addresses; longer abstracts will be edited. Indicate whether you prefer to present your paper during a platform session, as a poster presentation, or if either option is acceptable. Abstracts submitted for student competition should be clearly identified as such and a copy must also be submitted to the chair of the Student Activities Committee. **Note that the deadline for submission of abstracts for student scholarship and research awards to the Student Activities Committee is 15 April 2003.** (Contact information for the Student Activities Committee is given below). Oral presentations will be limited to a maximum of 15 minutes. A presentation of approximately 12 minutes is recommended, to allow time for questions and discussion at the end of each presentation. Carousel 35 mm slide projectors and an LCD projector connected to an IBM-compatible computer with PowerPoint XP will be provided. Slides or PowerPoint presentations (on a floppy disc or CD) should be given to the session projectionist prior to the beginning of your session. It is the author's responsibility to have slides loaded into a carousel properly or appropriately formatted for the available computer. If other audiovisual equipment is required, it must be requested when the abstract is submitted.

Special sessions are being planned on “The Population Effects of Disease”, “Immune Function and Other Bioindicators of Disease” and “Cervid Diseases”. If you wish to present during any of these sessions it is especially critical that you submit an abstract early. Submit abstracts to the Program Chair, Dr. Gary Wobeser, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of

Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 5B4, Phone (306) 966-7310, Fax (306) 966-7439, email: gary.wobeser@usask.ca

Abstracts of student presentations should be sent to Thierry M. Work, USGS-NWHC-HFS, PO Box 50167, Honolulu, HI 96850, USA (Thierry.work@usgs.gov)

### Sample Abstract

DETECTION OF THE CAUSATIVE AGENT OF DISSEMINATED VISCERAL COCCIDIOSIS (*EIMERIA* SP.) IN SANDHILL CRANES (*GRUS CANADENSIS*) AND WHOOPING CRANES (*GRUS AMERICANA*) BY POLYMERASE CHAIN REACTION AMPLIFICATION OF 18S rDNA.

SCOTT TERRELL, Department of Pathobiology, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610; SUSAN E. LITTLE, Department of Medical Microbiology and Parasitology, College of Veterinary Medicine, University of Georgia, Athens, GA, 30602; MARILYN G. SPALDING, Department of Pathobiology, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610; CALVIN M. JOHNSON, Department of Pathobiology, College of Veterinary Medicine, University of Florida, Gainesville, FL, 32610.

Disseminated visceral coccidiosis (DVC) is a disease characterized by the presence of disseminated lymphohistiocytic inflammatory lesions in sandhill cranes (*Grus canadensis*) and whooping cranes (*Grus americana*). The etiologic agent of DVC is a coccidian parasite of the genus *Eimeria*. Currently, diagnosis of this disease requires microscopic identification of the *Eimeria* parasite in tissue samples. However, microscopic identification of this parasite is often difficult due to the small number of organisms present or severe autolysis of field-collected specimens. A polymerase chain reaction (PCR) based assay was developed to detect *Eimeria* spp. DNA in frozen tissue samples from cranes known or suspected to have DVC. The PCR assay successfully detected *Eimeria* spp. DNA in tissues known to contain coccidial organisms and also detected DNA in highly suspicious lesions in which organisms were not microscopically visible. Tissue samples that did not contain lesions consistent with DVC and tissue samples from uninfected control birds did not produce a positive result with PCR assay. This work provides a useful diagnostic tool, the PCR assay, to confirm the presence of coccidian DNA in tissue lesions suspected to be the result of DVC.

**Greetings from the Editor.** It is with great pleasure and privilege that I take on the responsibilities of Supplement Editor! Many, many thanks to Dr. Charlotte Quist, who for the past six years has produced an excellent, informative, and often very entertaining Supplement for our benefit and enjoyment. I will do my best to continue along those same lines in the next coming years. Please do not hesitate to send any material you think would be appreciated by our diverse and international membership. I very much look forward to hearing from and working with all of you! —Pauline Nol

## WDA STUDENT ACTIVITIES

**ATTENTION MENTORS AND ADVISORS!** Please encourage your students to participate in this year's student activities! The deadline for scholarships is **APRIL 15, 2003**.

### Guidelines of the 2003 WDA Student Awards

**PLEASE READ CAREFULLY (You are required to follow instructions exactly)**

#### Wildlife Disease Graduate Student Research Recognition Award

**DEADLINE: April 15, 2003.** 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 \$1000 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.

Applicants should submit three items:

- 1) A summary of their research (10 pages double spaced written in type face font 10 or larger) structured as follows: Title, abstract, introduction, methods, results, discussion, references, tables and figures. The title page should be separate, and the 10-page limit applies to only the Title, abstract, introduction, methods, results, and discussion. **PLEASE ENCLOSE 7 COPIES.**
- 2) A cover letter stating how the research relates to WDA objectives (see inside back cover of WDA journal). **PLEASE ENCLOSE 7 COPIES.**

- 3) A letter of support from the faculty advisor indicating degree of student involvement in planning and execution of the research project. **PLEASE ENCLOSE 7 COPIES.**

Selection criteria: Each item (1–3) will receive a score and the sum of these scores will determine the rank of the candidate.

**GROUND FOR DISQUALIFICATION INCLUDE:**

- Items missing.
- Summary exceeds 10 pages (excluding tables, figures, and references).
- Submissions postmarked beyond deadline date.

**Wildlife Disease Association Scholarship**

**DEADLINE: April 15, 2003.** 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 a 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. To be considered, you should submit the following items:

- 1) One *Original* and 6 *photocopies* of all relevant transcripts. *Original* transcripts means: Official transcripts (i.e. with the imprint or official seal of the institution and signature of the responsible university officer) or copies signed by the student's faculty advisor.
- 2) 7 copies of a single page giving cumulative grade point average for all undergraduate degrees, graduate degrees, and ongoing coursework.
- 3) Up to 3 letters of support, including a letter from the student's faculty advisor, that address the following specific abilities of the applicant: academic achievement, scholarly promise, research ability, verbal and writing skills, industriousness, leadership abilities, judgment and potential for contribution to the field of wildlife diseases.
- 4) Evidence of superior scholastic achievement (course work, scholarships, awards, publications)

**GROUND FOR DISQUALIFICATION INCLUDE:**

- Items missing.
- Submissions postmarked beyond deadline date.

**Terry Amundsen Student Presentation Award**

**DEADLINE: WDA MEETING, 2003.** 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 a special session. Upon completion of the presentations, evaluation forms will be handed out to the audience who will be asked to score the presentations for the following:

- Quality of science
- Quality of visual aids
- Delivery
- Relevance to management of wildlife health

The student with the highest score will receive the award. Members of the WDA Student Activities Committee will adjudicate tied scores.

These awards are non-renewable and can be received only once by a given candidate. Applications must be submitted by April 15, 2003 to: Thierry M. Work, USGS-NWHC-HFS, PO Box 50167, Honolulu, HI 96850, USA (thierry\_work@usgs.gov)

**WDA ACTIVITIES**

**Call for Council Nominations!!!** The WDA Nominations Committee needs your help in obtaining nominations for four offices this year. They are President, Vice-president and two seats on Council. Please send your nominations for these offices to Scott Wright at [swright@usgs.gov](mailto:swright@usgs.gov) or 6006 Schroeder Road, Madison, WI 53711 or FAX at 608-270-2415. Please do not send a resume or CV for the nominee as we have a questionnaire for them to complete. Please send your nominees to me as soon as you can but not later than May 1, 2003.

## Call for WDA Awards Nominations!!!

The Awards Committee (Thijs Kuiken, John Fischer, Frances Gulland) is looking for nominations for the WDA Distinguished Service Award and Emeritus Award. This is your chance to put that great lady or gentleman who has done so much for the study of wildlife diseases in the limelight! Below is some information about the purpose of the awards, and who has received them in the past. Please take a few moments in your busy schedule to think about it, and send nominations, including a CV, to Thijs Kuiken (e-mail: kuiken@viro.azr.nl) by 15 March, 2003.

Purpose of the awards: The Distinguished Service (D.S.) Award is the highest award of the Wildlife Disease Association. The purpose of the D.S. Award is to honor a WDA member of long standing who, by his/her outstanding accomplishments in research, teaching and other activities, including participation in WDA affairs, has made a noteworthy contribution furthering the aims of the Wildlife Disease Association. Emeritus status is an honorary category of membership awarded by the Council to members of the WDA who have retired from their profession and who in the opinion of Council have contributed significantly to the study of wildlife diseases. Emeritus Award recipients will be considered full voting members who receive the *Journal of Wildlife Diseases* without further payment of dues.

Year	Distinguished Service Award	Emeritus Award	Year	Distinguished Service Award	Emeritus Award
2002	Anne Fairbrother	Not awarded	1986	Donald J. Forrester	L Dale Fay
2001	Torsten Morner	Victor F. Nettles	1985	Barry Mundy	Karl Borg
2000	David Jessup	Not awarded	1984	Louis N. Locke	Leslie A. Page
1999	Ian K. Barker	William Adrian	1983	Robert L. Rausch	Wayne I. Jensen
1998	William R. Davidson	Edward M. Addison	1982	Not awarded	Not awarded
1997	Rick Botzler	Daniel O. Trainer	1981	Charles P. Hibler	Archibald B. Cowan
1996	E. Thomas Thorne/ Elisabeth Williams	Albert Franzmann	1980	Leslie A. Page	Merton N. Rosen
1995	Werner P. Heuschele/ Victor F. Nettles	Rudolph Ippen	1979	John W. Davis	Not awarded
1994	Gary A. Wobeser	Louis N. Locke	1978	Roy C Anderson	David E. Davis
1993	Edward M. Addison	Roy C. Anderson	1977	Joan Budd	Joan Budd
1992	Emmett B. Shotts, Jr.	Not awarded	1976	Glenn L. Hoffman	Not awarded
1991	Danny B. Pence	Lars H. Karstad	1975	David E. Davis	William Jellison
1990	Not awarded	Not awarded	1974	Harold N. Johnson	Not awarded
1989	Thomas M. Yuill	John H. Arundel	1973	Daniel O. Trainer	Not awarded
1988	Annie K. Prestwood	Frank A. Hayes	1972	Archie McDiarmid	A. Murray Fallis
1987	Milton Friend	Ken Wolf	1971	Lars H. Karstad	Carlton M. Herman
			1970	Stanislaus Snieszko	Carl O. Mohr
			1969	Carlton M. Herman	Not awarded

## MEMBER NEWS

### In Memoriam

**Dr. David E. Worley, 1929–2002.** Dr. David Eugene Worley passed away from complications of pneumonia at Bozeman, Montana, on February 3, 2002. He was a Professor Emeritus of Veterinary Molecular Biology at Montana State University after a long and distinguished career in teaching, research and public service, having “retired” in 1994. He remained active in his office and laboratory until the time of his death. He was the only parasitologist at Montana State University for many years and taught a variety of courses. Several students began parasitology careers after taking one of his courses. He was an excellent mentor for his graduate students and all became and remained close friends. Dave’s extended family included all of his graduate students. The first graduate student received the M.S. degree in 1964 and 21 graduate students followed. Dave had a broad interest in parasitology. He was concerned with the host–parasite relationships of helminths of mammals, including susceptibility and resistance of animals to infection, host specificity, and the effect of parasitic diseases on the productivity of livestock and wildlife populations. He also studied the ecology and distribution of parasites of domestic and wild animals and the control of parasitic infections. His research resulted in 111 publications. He was very active in community, university and professional society affairs. He belonged to many scientific societies including the Wildlife Disease Association. He reviewed manuscripts of many scientific journals and was a member of the Editorial Board of the *Journal of Parasitology* for four years. He was President of the Rocky Mountain Conference of parasitologists in 1972–74. He served on committees for several societies and was on peer review committees for CSRS, the National Science Foundation and other programs. He was co-convenor of the section on diseases and parasites

of wildlife at the 28<sup>th</sup> Congress of the International Union of Game Biologists held at Krakow, Poland in 1987. Dave received the Award for Research in Veterinary Parasitology from the Merck Foundation in 1973.

Dave was born on August 6, 1929, in Cadiz, Ohio. He attended elementary and high school there and then attended The College of Wooster in Wooster, Ohio where he received an A.B. degree in Biology in 1951. Dr. R.V. Bangham, a noted authority on parasites of fish, was a parasitologist at The College of Wooster and it was his course that sparked an interest in parasitology for Dave. He did his senior research project with Dr. Bangham on parasites of fish in the upper Gatineau River Valley in Ohio and this resulted in his first publication. After college, Dave enlisted in the United States Army and spent most of his enlistment at Fort Dietrich, Maryland. He continued his education at Kansas State University where Dr. Merle Hansen had an excellent cadre of graduate students many of whom went on to distinguish themselves in parasitology careers. Dave spent the summers of 1956 and 1957 at the University of Michigan Biological Station. He received the M.S. degree from Kansas State University in 1955 and the Ph.D. degree in 1958. His graduate studies were on chemotherapeutics of ruminant parasites. He worked as a parasitologist for Parke, Davis and Company from 1958 to 1962. The next 32 years were spent at Montana State University where he held appointments in the Department of Biology and Department of Veterinary Science, later to become the Department of Molecular Veterinary Parasitology. Dave considered teaching and graduate education his first priorities. He took a personal interest in each of his graduate students and their research. At the time of his retirement his former graduate students presented him with a gift. Many laudatory letters came from students but one statement that seems to sum up his relationship with his graduate students is, "Dave has had a great influence on me. He has provided a great example as a scientist but more importantly he is an outstanding example of a decent and caring human being. He is one who knows how to live by the Golden Rule". In addition to his teaching and research activities he provided public service to the University, not only as a member of many committees, but all of the parasitologic material that came to the Montana State Department of Agriculture Animal Health Diagnostic Laboratory came to his laboratory. He also provided parasitology services for the Montana State Department of Fish, Wildlife and Parks Laboratory. He was active in community and church affairs including the Credit Union, Center for Campus Ministry and Boy Scouts. His hobbies included photography, hunting, hiking, camping and tinkering with old cars. He participated in the Audubon Society Christmas bird count for over 60 years.

He married Judy Jacobson in 1968, and she shared his love of the outdoors. Judy prepared many meals that they shared with their family—Dave's graduate students and their families. They had two sons—Mark and his wife Deanna of Houston, Texas, and Tim of Corvallis, Oregon.

Dave's feelings about life were typified on a card that was on his desk. "To enjoy your work and accept your lot in life—that is indeed a gift from God. The person who does that will not need to look back with sorrow on his past, for God gives him joy." *Ecclesiastes 5:19–20*

Memorials may be made to the Springhill Presbyterian Church, 9855 Walker Road, Belgrade, MT 59714 or to the Sacajawea Audubon Society, P.O. Box 1711, Bozeman, MT 59771. Mrs. Judy Worley may be contacted at 2400 Durston Road, #54, Bozeman, MT 59718.

*Submitted by Kenneth S. Todd, Jr.*

## HAPPENINGS IN THE FIELD

**West Nile Virus Identified in Alligators for the First Time.** University of Florida researchers have identified West Nile virus in 3 Florida alligators from a farm in Orange County, the first time the disease has been observed in a North American reptile species. State public health veterinarian Lisa Conti confirmed on 12 November 2002 that the three farm-raised alligators tested positive for the illness. The farm had been experiencing unusual numbers of deaths. Multiple agencies were involved in the diagnosis of West Nile viral infection in these animals and the following procedures and tests were carried out:

- Gross and histologic changes: University of Florida, College of Veterinary Medicine (U of F, CVM)
- Positive immunohistochemistry on brain sections: U of F, CVM
- Positive polymerase chain reaction (PCR) results on one brain and one spinal cord from two animals: Florida Department of Health (FD of H)
- PCR on multiple tissues of all animals: Centers for Disease Control and Prevention
- Viral isolation (multiple tissues, all animals): FD of H

It is not yet known what implications this may have on both the captive and the wild American alligator populations.

*—Adapted from ProMED-AHEAD Digest 11/16/02 Vol 2002 Number 189*

**Elk with Chronic Wasting Disease Found in South Dakota National Park.** Officials say lab tests have confirmed that a 5-year-old elk in Wind Cave National Park had chronic wasting disease (CWD). Staff at the park observed the elk showing symptoms. The animal was killed and brain tissue samples

were analyzed at Colorado State University in Fort Collins, Colo. It was the second case of CWD in a free-ranging big-game animal in South Dakota. A deer shot by a hunter near Oral last year tested positive for the disease. State game officials have continued testing deer and elk. Last summer an elk in a private herd near Fairburn died of CWD. Beginning in 1997, 6 captive elk herds, including some in the Black Hills area, became infected. One of those herds was next to Wind Cave National Park's southern boundary. It's not known where the park elk became infected. But the Wind Cave elk was believed to be part of the Gobbler Knob sub-herd in the southern part of the park. Last summer, Wind Cave got \$279,000 to study deer movement patterns and density levels and to test for chronic wasting disease. The study is scheduled to begin in February 2003.

—Adapted from *ProMED-AHEAD Digest 11/21/02 Vol 2002 Number 192*

## **National Wildlife Health Center's Quarterly Mortality Report**

**Black-bellied Tree Ducks in Texas.** In late July, wildlife biologists in Texas that were conducting a brood rearing study, reported mortality in 18–24 hour old black-bellied tree ducks at La Sal Vieja in Willacy County. Ducklings displayed abnormal behavior within 20 minutes of entering the water from their nests. Clinical signs included lagging behind the brood, swimming in circles, resting their head in the water, head shaking, convulsions, and sudden death. Some adult ducks also exhibited head shaking but only young chicks died. The salinity of La Sal Vieja has increased in recent years due to drought conditions. The salinity was 355 ppt at the time of this mortality. The NWHC detected brain sodium concentrations ranging from 2,440 to 4,050 ppm wet weight in six ducklings. Levels greater than 2,000 parts ppm wet weight are consistent with sodium poisoning. The ducklings had mild to severe hydropic changes in their eye lenses, a change observed in ducklings dying from sodium poisoning in other hypersaline wetlands.

**Salmonellosis in a Cattle Egret Colony.** Mortality of 750 cattle egrets occurred at a nesting colony near Imperial, California that contained 5,000 birds. Biologists from Sonny Bono Salton Sea NWR reported the wetland is surrounded by intensive irrigated agriculture and is near a large cattle feedlot. *Salmonella* sp. was isolated by the NWHC from three egrets and the isolates were submitted to the USDA National Veterinary Services Lab for serotyping. This is the seventh mortality event in cattle egrets due to Salmonellosis; six occurred in southern California and one in Texas. An estimated 9,500 cattle egrets have died in these seven events.

**Mortality in Colonial Bird Colonies in the Northern Great Plains, Mixed Species and Causes.** Numerous State and Federal wildlife management personnel in North Dakota, South Dakota and Minnesota reported mortality of colonial nesting birds throughout this quarter. Diagnostic investigations of white pelicans, double-crested cormorants, and ring-billed gulls, by the NWHC, South Dakota State University, South Dakota Public Health Lab, and Minnesota Veterinary Diagnostic Lab, confirmed mortality was due to multiple causes including: botulism type C (major cause), emaciation/starvation, salmonellosis, chlamydiosis, West Nile Virus, septicemia due to unidentified *Pasteurella* sp., and heavy internal parasitism. Unseasonably hot weather was the likely cause of death of a large number of very young-of-the-year white pelicans at Lac Qui Parle Wildlife Management Area in southwestern Minnesota, followed by botulism C mortality in ducks, gulls, and shorebirds. West Nile Virus was isolated from some older pelicans. At another site in Minnesota, a few neurologically impaired pied-billed grebes, pelicans, ducks, and cormorants were noted. Pelicans and grebes tested positive for West Nile virus and negative for botulism type C, while the reverse was true for the other species. A cormorant also tested positive for *P. multocida*, although lesions associated with avian cholera were not noted. Colonial nesting bird populations increased significantly during the mid to late 1990's in the northern plains states in response to high water levels and abundant nesting and foraging habitat. Drought conditions have returned the past few years with a resulting decline in available nest sites and food resources that may have increased competition and stress, especially for young of the year and juvenile birds. It remains to be seen if continued mortality events in the colonial nesting bird populations in the near future will result in significant declines in these species in the region.

**Botulism Type E Mortality Continues on Lake Erie.** Botulism type E mortality continued on Lake Erie throughout this quarter. In July, the NY State Wildlife Pathology Lab and NWHC investigated mortality in a ring-billed gull breeding colony near Lackawanna, NY. Losses were estimated at more than 3,000 birds. In late August and early September, the Canadian Wildlife Service (CWS) reported mortality of several thousand freshwater drum (sheepshead) near Port Colborne, Ontario, in northeastern Lake Erie. Simultaneously the CWS reported several hundred double-crested cormorants and ring-billed gulls and lesser numbers of shorebirds were found along the beaches of Long Point National Wildlife Area, Ontario; botulism type E was confirmed by the Canadian Cooperative Wildlife Health Center. With the confirmation of botulism type E again this summer in gulls, cormorants, and other species, biologists are concerned

about high losses of loons, mergansers, and fish- and mussel-eating ducks when they reach Lake Erie in late October and early November.

**West Nile Virus in the United States, 2002.** WNV activity in the 2002 season has been high, particularly in the Upper Midwest and the Gulf Coast. The distribution of West Nile virus infections in birds has extended across the continental United States to western Washington. In California, WNV was detected in a human, but the virus has not been found in mosquito pools, wild birds or sentinel chicken flocks. At the end of October, WNV was detected in western Idaho in a horse. Dead bird surveillance throughout the United States and Canada has confirmed over 15,900 WNV positive birds in 42 states and four Canadian provinces. As of November 15, 2002, there are 3,619 confirmed/probable human cases of West Nile virus in 41 of the United States and the District of Columbia, with 212 mortalities in 24 states. There have been 13,577 equine cases reported to the USDA, with an estimated 33% case fatality rate. WNV infection has been identified in several non-avian species this season, including a wolf, fox and gray squirrels, domestic dog, reindeer, harbor seal, and alligator. These data are based on regional information on WNV activity available on state Internet Web sites:

<http://www.aphis.usda.gov/oa/wnv/index.html>

[http://www.nwhc.usgs.gov/research/west\\_nile/west\\_nile.html](http://www.nwhc.usgs.gov/research/west_nile/west_nile.html), and

[http://www.cdc.gov/ncidod/dvbid/westnile/city\\_states.htm](http://www.cdc.gov/ncidod/dvbid/westnile/city_states.htm)).

—Submitted by Emi Saito, National Wildlife Health Center, Madison, WI

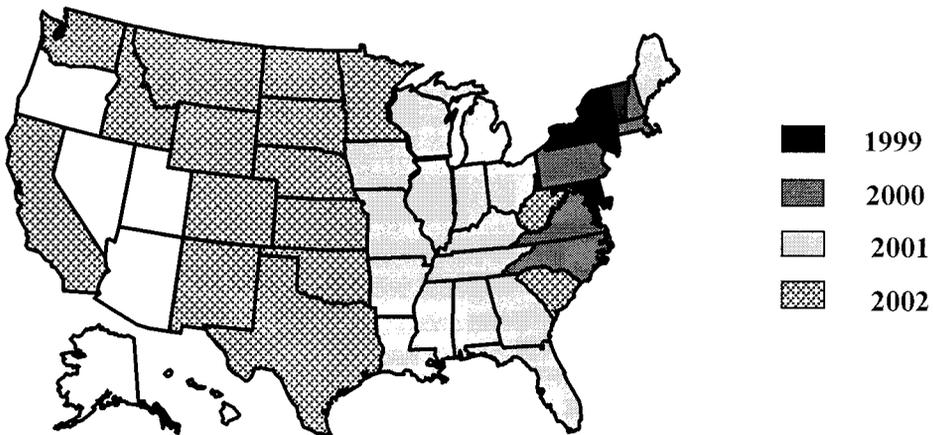


FIGURE 3. This map illustrates the progression of West Nile virus in the United States since its detection in 1999.

**Distribution of Positive West Nile Samples by State during 2002**

State	Birds	Humans	Horses	Mosquitoes	Sentinel Chickens
LA	+	+	+	+	+
FL	+	+	+	+	+
MS	+	+	+	+	+
NY	+	+	+	+	+
PA	+	+	+	+	+
NE	+	+	+	+	+
TX	+	+	+	+	+
NC	+	+	+	+	+
IA	+	+	+	+	+
IL	+	+	+	+	
AL	+	+	+	+	
OH	+	+	+	+	
SD	+	+	+	+	
GA	+	+	+	+	
KY	+	+	+	+	
IN	+	+	+	+	
MA	+	+	+	+	
MD	+	+	+	+	
NJ	+	+	+	+	
CT	+	+	+	+	
VA	+	+	+	+	
AR	+	+	+	+	
DE	+	+	+	+	
SC	+	+	+	+	
MO	+	+	+	+	
TN	+	+	+	+	
WI	+	+	+	+	
OK	+	+	+	+	
KS	+	+	+	+	
VT	+	+	+	+	
DC	+	+		+	
WV	+	+	+		
MI	+	+	+		
WY	+	+	+		
MN	+	+	+		
ND	+	+	+		
MT	+	+	+		
WA	+	+++	+		
RI	+	+		+	
CO	+		+		
NM	+		+		
ME	+				
NH	+			+	
CA		+			
ID			+		
Total states					
45	43	40	40	33	9

+ = Confirmed, ++ = Presumptive positive, +++ = Exposure in LA

## QUARTERLY WILDLIFE MORTALITY REPORT

July 2002 to September 2002

State	Location	Dates	Species	Mortality	Diagnosis	Reported by
AR	Calhoun Co., Camden	08/13/02–08/14/02	Black Vulture	4	Lead poisoning	NW
CA	Imperial Co., Salton Sea	06/10/02–ongoing	Brown Pelican Ring-billed Gull California Gull Caspian Tern Eared grebe Cattle Egret	241	Botulism type C	NW
CA	Imperial Co., NW Imperial area	07/10/02–08/01/02		750 (e)	Salmonellosis	
CA	Sutter Co., Sutter NWR	07/10/02–08/17/02	White-faced Ibis Mallard Duck Snowy Egret	100 (e)	Open	NW
CA	Sonoma Co., Cope- land Creek	08/07/02–08/10/02	Foothills Yellow- Legged Frog	14	Open	NW
GA	McDuffie Co., SCW Cedar Rock Road	04/05/02–05/17/02	Mourning Dove	25 (e)	Parasitism: tricho- moniasis	
GA	Green Co., Siloam SCW	06/19/02–07/10/02	Brown-headed Cowbird	168 (e)	Salmonellosis	
IA	Boone Co., Boone	09/11/02–09/30/02	Fox Squirrel	4 (e)	Viral infection: West Nile	NW
IA	Dubuque Co., Yacht Basin	07/15/02–10/10/02	Mallard Duck	350 (e)	Botulism type C	NW
IA	Louisa Co., Port Louisa National Wildlife Refuge	09/17/02–09/30/02	American White Pelican Common Egret	15 (e)	Viral Infection: West Nile	NW
ID	Jefferson Co., Market Lake WMA	07/12/02–07/30/02	Green-winged Teal Franklin's Gull Canada Goose	110 (e)	Botulism type C	NW
ID	Bonner Co., Cocola lala	07/20/02–09/12/02	Evening Grosbeak	200 (e)	Emaciation	NW
IL	Peoria Co., Chilli- cothe	08/17/02–09/30/02	House Finch	24 (e)	Viral infection: West Nile	NW
IN	Bartholomew Co., Hope	08/15/02–09/15/02	House Finch	70 (e)	Open	NW
IN	Lake Co., Lemon Lake	08/13/02–08/23/02	Bull Frog	2,000 (e)	Viral infection (suspect): Irido- virus	NW
KY	Boone Co., Flor- ence	08/13/02–ongoing	House Finch House Sparrow	14 (e)	Open Viral infection: West Nile	NW
MA	Middlesex Co., Lowell National Park	08/25/02–09/15/02	Mallard Duck Double-crested Cormorant Fish	50 (e)	Botulism type C	NW
MD	Talbot Co., Chesape- ake Bay, Poplar Island	07/12/02–07/15/02	Great Blue Heron Laughing Gull Canada Goose	6 (e)	Open	NW
MD	Dorchester Co., Goose Creek	09/20/02–09/28/02	Mallard Duck	22 (e)	Open	NW
ME	York Co., Pond Is- land NWR, Stratton Island	06/16/02–08/12/02	Common Tern Roseate Tern	400 (e)	Open	NW
ME	Oxford Co., Crocker Pond	06/28/02–06/28/02	Bull Frog	12	Open	NW
ME	Waldo Co., Sandy Stream	07/29/02–09/11/02	Bull Frog Green Frog	54 (e)	Deformities: etiolo- gy undeter- mined	NW
MN	Otter Tail Co., Folden Town- ship	06/24/02–06/28/02	Green Frog	20 (e)	Open	NW

## QUARTERLY WILDLIFE MORTALITY REPORT

July 2002 to September 2002

Continued

State	Location	Dates	Species	Mortality	Diagnosis	Reported by
MN	Lac Qui Parle WMA, Marsh Lake	07/15/02–09/01/02	Semipalmated Sandpiper Least Sandpiper Mallard Duck Blue-winged Teal	3,100 (e)	Exposure suspect, Viral infection: West Nile Botulism type C	NW, MN
MN	Agassiz NWR	08/13/02–08/18/02	Ring-billed Gull Pied-billed Grebe American White Pelican Mallard Duck Double-crested Cormorant	12 (e)	Viral infection: West Nile Botulism type C	NW
MO	Jasper Co., Joplin	08/12/02–08/14/02	Purple Martin	20 (e)	Open	NW, MO
MT	Stillwater Co., Hailstone NWR	07/22/02–07/31/02	Unidentified Gull Mallard Duck Redhead Duck Lesser Scaup Duck	25 (e)	Toxicosis: salt	NW
NC	Madison Co., Hot Springs	08/01/02–08/16/02	Common Grackle	11 (e)	Open	NW
NC	Alamance Co.	08/16/02–ongoing	White-tailed Deer	500 (e)	Epizootic hemor- rhagic disease	SCW
ND	Logan Co., Roes- ler Lake WPA	07/10/02–08/20/02	Ring-billed Gull Double-crested Cormorant	3,952	Chlamydiosis, Emaciation	NW
ND	Kidder Co., Horsehead Lake	07/15/02–09/03/02	Ring-billed Gull Double-crested Cormorant Franklin's Gull Eared Grebe American Avocet Western Grebe American White Pelican Ruddy Duck Forster's Tern Canada Goose Mallard Duck Gadwall Duck Northern Shoveler Lesser Scaup Duck American Coot Willet Unidentified Sand- piper Northern Pintail	465	Botulism type C Viral Infection: West Nile Aspergillosis Salmonellosis Emaciation	NW
ND	Renville Co., Up- per Souris NWR	07/24/02–08/20/02	Mallard Duck Gadwall Duck American Coot Blue-winged Teal	1,099	Botulism type C	NW
ND	Cass Co., Alice WPA	08/14/02–09/16/02	Unidentified Shorebird Mallard Duck American Coot Gadwall Duck	646	Botulism suspect	NW
ND	Stutsman Co., Ar- rowwood NWR	08/20/02–09/13/02	Unidentified Shorebird Mallard Duck Blue-winged Teal Green-winged Teal	251	Botulism type C	NW

**QUARTERLY WILDLIFE MORTALITY REPORT**

July 2002 to September 2002

Continued

State	Location	Dates	Species	Mortality	Diagnosis	Reported by
NV	Washoe Co., Truckee River	05/10/02–06/30/02	Bull Frog	20 (e)	Open	NW
OH	Greene Co., Fairborn	07/07/00–ongoing	Common Grackle European Starling	10	Open	NW
OH	WA, MI, VA, KY, NE, MD, IA, IN, WI and PA	08/10/02–ongoing	Great-horned Owl Red-tailed Hawk Sharp-shinned Hawk Barred Owl Double-crested Cormorant	1,500 (e)	Viral infection: West Nile Open	NW
OH	Meigs Co., Salem Township	08/31/02–10/10/02	White-tailed deer	500 (e)	Epizootic hemorrhagic disease	OH
SC	Charleston Co., West Ashley	04/27/02–04/27/02	Mallard Duck	3(e)	Toxicosis: diazinon	SCW
SC	Clarendon Co., Manning	05/14/02–06/14/02	Mourning Dove	12 (e)	Parasitism: trichomoniasis	SCW
SD	Brown Co., Sand Lake NWR	06/24/02–08/31/02	American White Pelican	18 (e)	Botulism type C	NW
SD	Bennett Co., Lacreek NWR	07/16/02–09/13/02	American White Pelican Double-crested Cormorant	172	Viral infection: West Nile	NW
SD	Brown Co., Zabrashaw WPA	07/20/02–09/10/02	Wood Duck Ruddy Duck American Wigeon Gadwall Duck Mallard Duck	815	Botulism type C	NW
SD	Day Co., Bitter Lake	07/22/02–08/31/02	American White Pelican Ring-billed Gull Double-crested Cormorant Blue-winged Teal	1,335	Botulism type C Salmonellosis Viral infection: West Nile	NW, SD
SD	Edmunds Co., Grass Lake WPA	09/23/02–09/23/02	American White Pelican	11 (e)	Trauma: gunshot	NW
TX	Galveston & Matagorda Counties, Brazoria	03/15/02–08/22/02	Northern Gannet	4	Open	NW
TX	Willacy Co., La Sal Vieja	07/23/02–08/01/02	Black-bellied Tree Duck Eared Grebe	80 (e)	Toxicosis: salt	NW
TX	Cameron Co., Harlingen	08/19/02–08/22/02	Laughing Gull	32	Salmonellosis	NW
TN	Cumberland Co., Crossville	08/20/02–09/03/02	American Goldfinch Unidentified Woodpecker American Robin	42 (e)	Salmonellosis	NW
VA	Suffolk Co., International Paper	07/09/02–10/05/02	Canada Goose Wood Duck Mallard Duck	281	Botulism type C	NW
VA	Newport News Co., Newport News Park	08/17/02–ongoing	White-tailed Deer	40 (e)	Epizootic hemorrhagic disease	SCW
VA	Lee Co., Stone Creek	09/01/02–09/18/02	Mallard Duck	35 (e)	Open, Toxicosis suspect	NW

## QUARTERLY WILDLIFE MORTALITY REPORT

July 2002 to September 2002

Continued

State	Location	Dates	Species	Mortality	Diagnosis	Reported by
VT	Bennington Co., Wood Pond	07/01/02–08/01/02	Eastern Red-spot- ted Newt	15 (e)	Fungal infection: NOS	NW
WA	King Co., Seattle	09/03/02–09/16/02	American Crow Domestic Pigeon (Rock Dove)	36 (e)	Toxicosis: Organo- phosphorus compound	NW
WI	Winnebago Co., Fox Point of Little Lake Butte des Morts	07/24/02–08/07/02	Mallard Duck	24 (e)	Botulism type C	NW, WI
WI	Winnebago Co., Menasha	08/07/02–08/26/02	Mallard Duck	20	Botulism type C	NW
Updates/Corrections:						
FL	Okaloosa Co., Destin Harbor	02/01/02–07/10/02	Brown Pelican Common Loon Osprey American White Pelican Wood Duck	60 (e)	Open	NW
IL	Winnebago Co., Rockford	12/26/01–03/13/02	House Sparrow	240 (e)	Salmonellosis	NW
NY	Erie Co., Lacka- wanna	06/25/02–ongoing	Ring-billed Gull	3,525 (e)	Botulism type E	NW
ONT	Port Colborne Long Point		Double-crested Cormorant Unidentified Shorebird		Botulism type E	CWC, NWA
NY	Lake Erie shore line	06/10/02–ongoing	Mudpuppy Salamander	20,000 (e)	Open	NW

(e) = estimate; \* = morbidity, not mortality.

New York State Dept. of Environmental Conservation (NY), Southeastern Cooperative Wildlife Disease Study (SCW), Canadian Cooperative Wildlife Health Center (CCW), USGS National Wildlife Health Center (NW), Wisconsin Dept. of Natural Resources (WI), Minnesota Dept. of Natural Resources (MN), Ohio Division of Wildlife (OH), Missouri Dept. of Conservation (MO).

Written and compiled by Kathryn Converse/Rex Sohn—Western US, Kimberli Miller/Grace McLaughlin—Eastern US, Christine Lemanski, 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](mailto:kathy_converse@usgs.gov). USGS Wildlife Health Center, 6006 Schroeder Road, Madison, WI 53711.

## WDA SECTION NEWS

### NEWS FROM EUROPE

**New Conditions.** If you are investigating a disease that may be previously unreported, why not provide a short preliminary description, together with your contact address. The main objective here is to stimulate dialogue with people working in similar fields. This quarter we have a report of a new condition in Spanish chamois and a summary of the excellent epidemiological data recorded from the Phocine Distemper Virus (PDV) outbreak.

**Pestivirus in Chamois from the Catalan Pyrenees (NE Spain) in 2001 and 2002.** In February 2001, a 3 year-old male chamois (*Rupicapra pyrenaica*) was found in an agonal state at the National Hunting Reserve of Alt Pallars, in the Catalan Pyrenees (NE Spain). The animal died, but the cause of death could not be determined. Between March and June of the same year, 7 live chamois and 8 dead, were found in the same area, presumably due to the same condition. During summer and winter no more affected animals were detected. But at the end of January 2002, another chamois was found with the same symptoms and in the same area. During the months of February, March and April, a total of 11 affected chamois were culled or live captured and about 60 animals were found dead. No other domestic or wild ungulates species have been affected with the same clinical signs.

The animals presented with the same symptoms: weakness and difficulty moving. During April and

May, the chamois became alopecic and the skin hyperpigmented. At clinical examination, the chamois were cachectic, anaemic and heavily infested with ticks. On blood smears, piroplasms were seen. Microscopic lesions included hyperplasia, melanosis and follicular atrophy in the skin. Non-specific lesions were also observed in the central nervous system, consisting of neuronal death and several degenerative lesions (pyknosis, chromatolysis, spheroids and spongiosis). However, in a few animals, non-purulent encephalitis was detected. Lesions found in the kidneys and spleen, such as hemosiderin deposits, were possibly associated with piroplasmiasis.

Initially in 2001, an intoxication was suspected to be the cause, but toxicological analyses proved negative. Parasitologic and microbiologic analyses were also negative, and the cause of the disease could not be identified. In 2002, a Pestivirus was detected in chamois from the French side of the Pyrenees, with a similar symptomatology, in a population 50 km distant from the Spanish population, but apparently not connected or related. A Pestivirus was also detected, by serology and PCR, in the chamois in Spain, in samples from different animals. To our knowledge, this virus has not been described in chamois before now. Preliminary analysis of the virus, indicates that it is more closely related to Border disease virus and reindeer Pestivirus, than to cattle or hog Pestiviruses.

Moreover, in 6 of the animals examined, a meningothelial meningioma of the pineal gland has been found. We do not know whether there is any relationship between the tumours and the Pestivirus infection described. An etiologic and epidemiological study is on-going to determine the causative agent and to investigate whether other species of wild and domestic ungulates are affected or involved in the disease transmission.

—Ignasi Marco and Santiago Lavin. Servei d'Ecopatologia de Fauna Salvatge. Facultat de Veterinària, Universitat Autònoma de Barcelona. 08193-Bellaterra. Spain. E-mail: Ignasi.Marco@uab.es

**Phocine Distemper Virus in the UK 2002.** In May 2002 an unusually high mortality among Common or Harbour seals (*Phoca vitulina*) was seen along the coast of Denmark. Post mortem examinations confirmed Phocine Distemper virus (PDV); this is the same virus that caused the 1988 outbreak. Since then the virus has spread to Germany, Sweden, Southern Norway and the Netherlands.

On the 13<sup>th</sup> of August 2002 PDV was confirmed in Common seals found dead in late July on the Wash in South Eastern England.

To date (30/10/02), 2980 seals have been found dead along the UK coastline, with the total confirmed cases of PDV running at 48. However due to autolysis and logistical reasons not all carcasses were examined. Of the 48 positive cases, 45 were Common seals the other 3 were Grey seals (*Halichoerus grypus*). By region this breaks down as follows:

*England:*

Total dead seals	2547
Total confirmed cases	38
Total Common seals	37
Total Grey seals	1

*Scotland:*

Total dead seals	274
Total confirmed cases	8
Total Common seals	6
Total Grey seals	2

*Wales:*

Total dead seals	105
Total confirmed cases	0

*Northern Ireland:*

Total dead seals	54
Total confirmed cases	2
Total Common seals	2
Total Grey seals	0

The outbreak appears to be slowing as the number of dead seals reported for the period 23–29 October is 116 compared with the peak of 431 in the week 11–17 September. However it does appear to be spreading up the East Coast of the UK into Eastern Scotland and Orkney. This is a worrying development as Orkney and Shetland has the greatest numbers of Common seals.

The source of the positive cases in Northern Ireland is unknown, but could possibly originate from arctic species such as the Harp seal (*Phoca groenlandica*) which are known to be a reservoir of infection. There has also been a confirmed case in a Common seal in the Republic of Ireland.

Sources: Sea Mammal Research Unit, Paul Jepson Zoological Society of London

—Nick Davison, Veterinary Laboratories Agency, Truro, England, October 2002, E-mail: n.davison@vla.defra.gsi.gov.uk.

## Meetings

**European Society of Veterinary Pathology 21st Annual Congress, Dublin, Ireland 2003.** The 21st Annual Congress of the European Society of Veterinary Pathology will be held jointly with a meeting of the British Society of Toxicological Pathology in Dublin, Ireland from 10–13 September 2003. The Congress venue is Trinity College Dublin, which is located in the city centre and within walking distance of many of Dublin's most famous landmarks. From there you will be able to enjoy the rich cultural heritage made famous by Joyce and Wilde. The scientific programme will comprise offered oral and poster presentations, invited keynote lectures and symposia. Dublin is easily accessible with international air and sea links to continental Europe, Britain, North America and other regions. For details, contact Congress Secretariat, Ovation Group, 1 Clarinda Park North, Dun Laoghaire, Co. Dublin, Ireland. TEL: +353 1 2802641; FAX: +353 1 2805405; E-MAIL: [esvp@ovation.ie](mailto:esvp@ovation.ie)

—Dr. Seamus Kennedy, Veterinary Sciences Division, Belfast BT4 3SD, Telephone +44 (0)28 9052 5701, Fax +44 (0) 28 9052 5767, E-mail [seamus.kennedy@dardni.gov.uk](mailto:seamus.kennedy@dardni.gov.uk)

**European Section.** Material suitable for publication in *News from Europe* includes recent wildlife disease outbreaks and new diseases in Europe, short case and meeting reports; job and scholarship announcements. Members for whom English is a second language, will be accommodated as far as possible. The deadline for the next issue is February 2003.

Please mail, fax or e-mail submissions to, Paul Duff, VLA Penrith, Merrythought, Calthwaite, PENRITH, Cumbria, CA11 9RR, United Kingdom, e-mail [p.duff@vla.defra.gsi.gov.uk](mailto:p.duff@vla.defra.gsi.gov.uk) Fax +44(0)-1768-885314.

## NEWS FROM AFRICA

I wish to inform the WDA council that the WDA—Africa & Middle East Section has recently concluded its first section meeting, which was held in Arusha, Tanzania.

We had 40 participants in attendance from 11 countries represented, including UAE in the Middle East. We received 15 presentations from various speakers, which covered several topics including diseases of concern during wildlife movement, zoonotic diseases, illegal bushmeat trade, and conservation of chimpanzees and gorillas. We had a limited time to organize our first meeting, and almost no funds to begin with, but were very fortunate to get good support from AU-IBAR who funded the costs of the venue, and refreshments, and support from Novartis to cover the costs of our speakers and evening dinners. We had additional support from Tanzania National Parks, who gave transport and a complimentary visit to Tarangire National Park and the Frankfurt Zoological Society, who hosted participants for the closing dinner. After our section meeting, we held our first ever annual general meeting. We will soon provide you with a copy of our proceedings arising from this meeting.

—Elizabeth Wamba, Kenya Wildlife Service, P.O. Box 40241, Nairobi, Kenya. Tel: 254–2–504810; Fax: 254–2–505866, email: [ewamba@yahoo.com](mailto:ewamba@yahoo.com)

## WDA SECTION CHAIRS AND CONTACT INFORMATION

**African Section.** For information regarding the African Section, contact Elizabeth Wamba, Kenya Wildlife Service, P.O. Box 40241, Nairobi, Kenya. Telephone: 254-2-504180; Fax: 254-2-505866; email: [ewamba@yahoo.com](mailto:ewamba@yahoo.com)

**Australasian Section.** For information regarding the Australasian Section, contact Peter Holz, Healesville Sanctuary, P.O. Box 248, Healesville, Victoria 3777 Australia. Telephone: 61 3 5957 2864; fax: 61 3 5957 2870; email: [pholz@zoo.org.au](mailto:pholz@zoo.org.au)

**European Section.** For information regarding the European Section, contact Marc Artois, ENVL, Unité Pathologie infectieuse, BP83, 69280 Marcy l'Etoile, France, Telephone: 33-478-87-27-74, email: [m.artois@vet-lyon.fr](mailto:m.artois@vet-lyon.fr)

**Latin American Section.** For information regarding the Latin American Section, contact Alonso Aguirre, TUSVM Wildlife Clinic, 200 Westboro Road, North Grafton, MA 01536, USA. Telephone: (508) 839-7918; fax: (508) 839-7930; email: [aguirre@wpti.org](mailto:aguirre@wpti.org)

**Nordic Section.** For information regarding the Nordic Section, contact Hans-Henrik Dietz, Danish Veterinary Laboratory, Department of Fur Animal and Wildlife Diseases, 2 Hangovej, DK-8200 Aarhus N, Denmark. Telephone: 45-89-37-24-17; fax: 45-89-37-24-70; email: [hhd@svs.dk](mailto:hhd@svs.dk)

**Wildlife Veterinarian Section.** For information regarding the Wildlife Veterinarian Section, contact Dr. Terry Kreeger, Wyoming Game and Fish Department, 2362 Highway 34, Wheatland, Wyoming 82201 USA. Telephone: 307-322-2571; FAX 307-766-5630; email: [tekreege@wyoming.com](mailto:tekreege@wyoming.com)

## JOB ANNOUNCEMENTS

**Infectious Diseases.** Tenure-track **Assistant Professor** position. The Biology Department at the University of North Dakota offers graduate degrees through the Ph.D. and provides an environment for building a competitive research program. The Department has a strong tradition in vertebrate ecology, evolution, and conservation biology. We seek an individual with **demonstrated expertise in the study of infectious diseases in wild vertebrate populations, with special interest in the epidemiology or ecology of vertebrate diseases in natural and human modified ecosystems.** Ph.D. required and postdoctoral experience desirable. Establishment of a productive, extramurally funded research program and direction of graduate students are expected. Teaching duties include an undergraduate course in the biology of infectious diseases and participation in a team-taught introductory biology lecture. For additional information about our department, consult **website:** <http://www.und.edu/dept/biology/jobs.html>. Send curriculum vitae, statements of teaching and research interests, three representative reprints, and have three letters of reference sent to: Dr. Robert Newman, Chair, Infectious Disease Search Committee, Department of Biology, University of North Dakota, Grand Forks, ND 58202-9019. Review of applications will begin November 15, 2002 and continue until the position is filled. *UND is an Affirmative Action, Equal Opportunity Employer.*

**Wildlife Epidemiologist—Associate Veterinarian.** The Field Veterinary Program of the Wildlife Conservation Society is seeking to hire a wildlife epidemiologist at the associate veterinarian level. The position is based in New York with approximately four months per year of domestic and international travel required. Principal responsibilities include: 1) providing epidemiological leadership, advice, guidance and assistance to field projects and programs of WCS, partner organizations, agencies, and/or governments, 2) advising on wildlife health surveillance, monitoring and management issues related to protecting the health of wildlife, 3) training foreign professionals, and 4) writing and public speaking. A doctorate or equivalent in veterinary medicine is required, as is post-doctoral training or work in epidemiology and a minimum of three years of veterinary or health related work with wildlife. Interested candidates should send letter of interest and curriculum vitae to: Ms. Tawanda Williams, Human Resources, Wildlife Conservation Society, 2300 Southern Blvd, Bronx, NY 10460, U.S.A.

## TRAINING/EDUCATIONAL OPPORTUNITIES

**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](mailto:joy_evered@fws.gov) or Marilyn Blair DVM, at the Idaho Fish Health Center; email [marilyn\\_j\\_blair@fws.gov](mailto: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, 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](http://www.savingcranes.org).

**Toxicology Short-course for Wildlife Professionals February 22, 2003; Brookfield Zoo, Brookfield, Illinois AND March 29, 2003; New England Aquarium, Boston, Massachusetts.**

This course is being offered by the ASPCA Animal Poison Control Center in conjunction with the Brookfield Zoo in February 2003 and the New England Aquarium in March 2003. The goal of the one-day course is to enhance the medical care of wildlife species by providing education in the area of toxicology to wildlife professionals, including veterinarians, veterinary technicians, rehabilitators, biologists, students, and other interested animal care personnel. The day will include lectures on decontamination procedures, pesticides, herbicides, environmental pollutants, heavy metals, and biotoxins, and conclude with an evening roundtable discussion/question-and-answer session. Bound handout materials and continuing education credits will be available. For further information, please contact Dr. Lisa Murphy at 217-337-5030 x246 or [lmurphy@apcc.aspca.org](mailto:lmurphy@apcc.aspca.org).

**Wildlife Health Summer School 15–19 June 2003, Schiermonnikoog, The Netherlands.**

The Dutch Wildlife Health Centre (DWHC) and the Graduate School Animal Health (GSAH) are organizing a post-graduate level course providing insight in wildlife health research issues, with an emphasis on free-living wildlife, and in relation to interaction with humans and domestic animals, nature conservation and animal welfare. The aim is to enhance the skills of participants in designing and conducting research studies of wildlife health and to increase their awareness of the application of research results to nature management. The 2003 summer school topics are: (1) Disease transmission between livestock and wildlife (key lecturer: Prof. dr. Roy Anderson). Risk assessment and control strategies will be discussed, using Foot-and-Mouth Disease as an example. (2) Prion diseases and wildlife (key lecturer: Prof. dr. Beth Williams). Topics will include Chronic Wasting Disease and the assessment and management of zoonotic risk. (3) Monitoring of wildlife health (key lecturer: Prof. dr. Ab Osterhaus). The Dutch harbour seal population will be used as an example, including the study of the 2002 Phocine Distemper epidemic, and a hands-on seal necropsy. Early registration fee (until the 30th of March 2003): 350 Euro. Late registration fee (after 30th of March 2003): 475 Euro. For registration and further information: e-mail: [info@dwhc.nl](mailto:info@dwhc.nl) website: <http://www.dwhc.nl> Tel: +31-10-4089254 Fax: +31-10-4089485.

**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](mailto:F.Scullion@zoo.co.uk)

## MEETING ANNOUNCEMENTS

**53rd Annual Meeting of the Wildlife Disease Association. August 11–14, 2003; Saskatoon, Saskatchewan, Canada.** Please see details of the meeting under “WDA Activities” in this issue.

**17th Annual Meeting of the Society for Conservation Biology. June 28–July 2, 2003 in Duluth, Minnesota, USA.**

The local organizing committee is now accepting abstracts for invited symposia, oral and poster presentations. The theme of the meeting, Conservation of Land and Water Interactions, will focus attention on water, forests, wetlands, the Great Lakes and other large lakes and rivers of the world, marine and coastal systems, and associated biodiversity issues. Please note that the topics for invited symposia have already been selected, and that abstracts for symposium presentations are by invitation only. Abstracts should be submitted for oral and poster presentations and for invited symposia. Instructions for preparing your abstract are available on the meeting Web site. Please follow the instructions carefully, including all requested information and formatting. Any abstract with errors or omissions will be returned to the sender for correction and runs the risk of missing the abstract submission deadline. Abstracts should be submitted electronically via the meeting Web site. Please visit the URL given below, and note that Web submission is strongly encouraged. <http://www.conservationbiology.org/2003>

All abstracts must be received by 10 JANUARY 2003. The local organizing committee will attempt to notify all authors by 21 February 2003 regarding the outcome of the review process.

For More Information: Kris Lund, University of Minnesota Duluth, Continuing Education, 251 Darland, 1049 University Drive, Duluth, MN 55812-3011 USA, Phone: 218-726-7810 Fax: 218-726-6336 E-mail: [2003@conservationbiology.org](mailto:2003@conservationbiology.org)

**10<sup>th</sup> Annual Conference of The Wildlife Society. September 6–10, 2003; Burlington, Vermont.** The meeting will include symposia, workshops, contributed papers and posters on topics within the theme of Excellence in Wildlife Stewardship through Science and Education. Deadline for submission of abstracts is February 14, 2003. Instructions for preparing and submitting abstracts can be found at [www.wildlife.org](http://www.wildlife.org) under ‘conferences’.

**American Association of Zoo Veterinarians Annual Conference. October 5–9, 2003; Hyatt Regency, Minneapolis, Minnesota.** The American Association of Zoo Veterinarians will hold its 2003 annual conference in Minneapolis, MN in conjunction with ARAV and NAG. Program sessions include Nutrition, Pharmacology (Nutriceuticals and phytochemicals), Conservation Medicine, AZA Programs: SSP/TAG Veterinary Advisor Updates, Emerging Diseases, Pathology, Advances in Technology and Diagnostic Testing, Case Reports and Practice Tips, Avian, Aquatics and Marine Mammals, Hoofstock, Primates, Carnivores and Small Mammals, and Hospital Administration and Leadership. There will also be a poster session, veterinary and graduate student paper competitions, and workshops/wet labs.

**February 15, 2003**—deadline for authors to submit titles for consideration to the session chairs. The final selection will not be made until all potential submissions have been received.

**March 1, 2003**—deadline for session chairs to select potential speakers for their sessions. **April 1, 2003**—deadline for submission of speaker’s papers to the session chairs. For additional conference information, visit our website [www.aazv.org](http://www.aazv.org), or contact Wilbur Amand, VMD, Executive Director/AAZV, 6 North Pennell Road, Media, PA 19063, USA. Phone (610) 892-4812. Fax (610) 892-4813. E-mail: [AAZV@aol.com](mailto:AAZV@aol.com)

**Note from the Editor:** Please send meeting announcements, diagnostic riddles, position and grant announcements, miscellaneous items, etc. for the Supplement to the Journal of Wildlife Diseases to Pauline Nol, USGS/National Wildlife Health Center, 6006 Schroeder Rd., Madison, WI, 53711. Phone: (608) 270-2489 Email: [pauline\\_nol@usgs.gov](mailto:pauline_nol@usgs.gov). Double spaced typewritten or electronic mail files in WordPerfect or Microsoft Word are preferred. The deadline for submission of articles for the next issue (April 2003, JWD Vol. 39, No. 2) is February 25, 2003.