



AMERICAN ASSOCIATION OF WILDLIFE VETERINARIANS

SPRING 2009

MESSAGE FROM THE VICE PRESIDENT



Jonathan Sleeman,
President

Brief note from AAWV President Jonathan Sleeman: My apologies for not producing a President's Corner this edition. AAWV Vice President Dr. Mark Cunningham has kindly agreed to write a message, and has taken this opportunity to highlight the forthcoming AAWV conference activities. As you will see below, Mark and many other AAWV members have been busy organizing some great events, and I hope to see as many of you as possible at these conferences. Have a wonderful summer!

AAWV Conference Activities

It's conference season again, and AAWV will be participating in both the Wildlife Disease Association and American Association of Zoo Veterinarians (AAZV) conferences this year. The AAWV will be meeting jointly with AAZV at the conference in Tulsa, Oklahoma October 24th through the 30th. This is shaping up to be an exciting conference with extensive AAWV involvement. The Cutting-Edge Speaker will be Dr. Ron DeHaven, the Executive Vice-President of the American Veterinary Medical Association, who'll be presenting on the conference theme "One Health" (see Dr. DeHaven's biosketch on page 4). AAWV members also will be instructing two great half-day workshops on Sunday October 25th. The first will be a wildlife necropsy wet-lab



Mark Cunningham,
Vice-President

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lead by Dr. Scott Terrell and will cover necropsy techniques and sample collection from ruminants (white-tailed deer) and waterfowl (Canada geese). The afternoon workshop, “Tools for Veterinarians in Wildlife Field Research,” will include didactic and interactive lectures covering the logistics and unique challenges of wildlife medicine in the field. The workshop will be lead by Drs. Sharon Deem and

Chris Fiorello and will include lectures by Drs. Scott Larsen, Dave Miller, and Bill Swanson. Topics to be covered include wildlife welfare, the logistics of working internationally, and reproduction assessments in the field, among others. This workshop complements the soon-to-be-released “Guidelines for veterinarians interested in *in situ* conservation and free-ranging wildlife health projects” prepared

by the Committee on Wildlife Health and Conservation (see page 5 for further information about the guidelines). AAWV members will also be chairing or co-chairing sessions including “Wildlife Conservation Medicine (Dr. Sharon Deem, chair), “One Health” (Dr. Steve Osofsky, co-chair), Wildlife and Zoo Animal Welfare (Dr. Dave Miller, co-chair), and “Greening of Veterinary Medicine” (Dr. Chris Fiorello, co-chair). Dr. Fiorello also will be assisting with the AAWV portion of the auction. The AAWV auction proceeds this year will benefit student activities. And it’s never too early to donate items for the auction! If you have items to donate, please complete the donation form at the AAZV conference website and indicate that the item is for AAWV. Items can be shipped to Dr. Kay Backhues or brought to the conference. Don’t forget to keep your eye out for good auction items during your travels this summer. Please contact Dr. Fiorello for further information.

The AAWV also is actively involved in the WDA conference at the Semiahmoo Resort in Blaine, Washington, with both organizing (Dr. Joe Gaydos) and program (Dr. Colin Gillin) chairs being AAWV members.

AAWV is a co-sponsor of the conference and is also co-sponsoring a student mixer that will be dedicated to the memory of Dr. Albert Franzmann. The AAWV Cutting-Edge Speaker will be Dr. Peter Ross, Research Scientist at the Institute of Ocean Sciences in Sydney, Canada, who will be speaking on “Killer whales at risk: can we sustain these charismatic creatures in the face of conservation threats?”

Finally, AAWV also will be co-sponsoring the 3rd International Chronic Wasting Disease Symposium, to be held in Park City, Utah July 22nd-24th. Further information can be found at the conference website www.regonline.com/builder/site/Default.aspx?eventid=650932.

Great conferences to choose from this year – and if you can’t decide, go to all three! Also, please support AAWV by registering for the AAWV workshops at the AAZV/AAWV Conference and by sending in auction items.

In addition to conferences, it is also that time of year for elections. We are soliciting nominations for AAWV officer elections – please contact Dr. Kirsten Gilardi by email with your nomination. A ballot for officer elections will be distributed in August and the election results announced

Don't forget to keep your eye out for good auction items during your travels this summer.

at the annual business meeting at the AAZV/AAWV Conference in Tulsa. Also on the ballot will be a proposal to amend the AAWV by-laws to change the name of the AAWV-sponsored lecture from the “AAWV Cutting-Edge Speaker” to the “Albert Franzmann Memorial Lecture” to honor the memory of Dr. Al Franzmann – one of the founding members of AAWV.

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WILDLIFE VETERINARIANS

Founded in 1979, the AAWV is a national, non-profit organization of veterinarians interested in all aspects of wildlife health.

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In Memoriam

Dr. Stephen M. Kerr, 64, of Mitchell, Neb., passed away Sunday, Sept. 14, 2008, while on a hunting trip in Colorado with his uncle and special friend Bill Heiman. He had been battling cancer.



Dr. Kerr was born Feb. 28, 1944, in Indiana. In 1971, he received a Bachelor of Science degree in wildlife management from Colorado State University and was accepted into the university's College of Veterinary Medicine the following year. In 1976, Dr. Kerr was granted his Doctor of Veterinary Medicine and dedicated the rest of his life to healing and protecting

animals. Over the past 30-plus years in private practice, Dr. Kerr left a legacy that will live on forever in the hearts and souls of the patients and their owners whom he touched.

Dr. Kerr was proudest of his work with wildlife and especially raptors. He was named president of the Wyoming Veterinary Medical Association, an honorary member of the Wildlife Society, the Companion Animal Veterinarian of the Year – Leo Bustad Award, the Nebraska Wildlife Conservationist of the Year – Nebraska Game and Parks Commission, the Western Nebraska Wildlife Conservationist of the Year – Audubon Society. He also worked several years as a trail veterinarian on the Iditarod Sled Dog race and the Rocky Mountain (Pedigree) Stage Stop Sled Dog Race. Survivors include his wife, Joanne; three siblings, Rick (Gayle) Kerr, Kevin (Lori) Kerr and Barbara Kerr; four children, Todd (Lisa) Kerr, Shane Kerr, Suzanna (Scott) Dever and Scott (Heather) Neu; and six grandchildren, Kate, Bryce, Derek, Charlie, Jake and the newest addition, Andrew. Memorial contributions may be made in Dr. Kerr's name to the Panhandle Humane Society in Scottsbluff, NE or to the Waggin' Tails Animal Shelter in Torrington, WY.

AAWV Creates the Dr. Albert Franzmann Memorial Lecture

In honor of our late esteemed colleague, the AAWV officers and advisory council are proposing to rename the Cutting-Edge Speaker Presentation (a feature of our AAWV annual meetings) to the Dr. Albert Franzmann Memorial Lecture. New language in the AAWV Bylaws reflecting this proposal is reproduced (in blue) below. The proposal will be put to AAWV membership vote in the special edition newsletter ballot this August and results announced at the annual business meeting during the joint AAWV/AAZV conference in Tulsa, Oklahoma this coming October.

Article IV - Annual Meeting

Section 1 Time and Duration - An annual meeting of the membership of the Association shall be held in each calendar year. The date and duration of the meeting shall be determined by the Executive Board and shall conform in general to meeting with other groups with which the Association is affiliated such as: The American Veterinary Medical Association, the Wildlife Disease Association, the Wildlife Society and the American Association of Zoo Veterinarians.

Section 2 Dr. Albert Franzmann Memorial Lecture – Time and funds permitting the president of the Association in consultation with the Board of Governors will invite a pre-eminent speaker to present the Dr. Albert Franzmann Memorial Lecture during the annual meeting. The lecture will be given in memory of Dr. Franzmann and will be on a topic germane to the Association.

Meet the AAZV/AAWV Conference Cutting-Edge Speaker

Dr. W. Ron DeHaven is the executive vice president of the American Veterinary Medical Association (AVMA) – a 75,000 member-strong organization dedicated to advancing veterinary medicine. AVMA awards include the President's Rank Awards (Meritorious and Distinguished), Secretary's Honor Award (twice), and Meritorious Service Award. He also received the Roswell Award from the Scientists Center for Animal Welfare, and an honorary degree from Purdue University.

Dr. DeHaven has worked more than 20 years with the Animal Plant Health Inspection Service (APHIS) – most recently as APHIS Administrator. Prior service included deputy administrator for APHIS' Veterinary Services program, acting associate administrator, deputy administrator for the Animal Care Unit, and other APHIS positions. Prior to starting work at APHIS, Dr. DeHaven served in the U.S. Army Reserves and National Guard.

Dr. DeHaven obtained his doctor of veterinary medicine degree from Purdue University in 1975 and a master's degree in business administration from Millsaps College in 1989. Further information about Dr. DeHaven can be found at: http://www.avma.org/about_avma/governance/leadership/dehaven_ron.asp).

Meet the 2009 WDA/AAWV Cutting-Edge Speaker

Peter S. Ross is a marine mammal toxicologist at the Institute of Ocean Sciences of Fisheries and Oceans Canada in Sidney, British Columbia, Canada. He has been carrying out research on environmental contaminants in marine mammals for 20 years. He holds Adjunct Professorships at Simon Fraser University and the University of Victoria. He obtained his PhD from the University of Utrecht in the Netherlands (1995), his MSc from Dalhousie University in

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Halifax, Nova Scotia (1990), and his BSc (Honours) from Trent University in Peterborough, Ontario (1985). He has published over 95 international scientific articles and book chapters. Dr. Ross is an international authority on the effects of persistent organic pollutants on the health of marine mammals. He has provided advice to conservation teams on several endangered marine mammals, including the Mediterranean monk seal, the northern right whale, California sea otters, Galapagos sea lions, Indo-Pacific humpback dolphins, and NE Pacific killer whales. Dr. Ross gives numerous public lectures to audiences around the world, and his work has been featured in local, national and international newspapers, magazines, radio and television.

UPDATE

Committee on Wildlife Health and Conservation

Mark Cunningham, AAWV vice president

Dr. Sharon Deem and the Committee on Wildlife Health and Conservation (CWHC) have completed a draft of the “Guidelines for veterinarians interested in *in situ* conservation and free-ranging wildlife health projects.” These Guidelines provide veterinarians with basic information (and links for further information) on topics such as working with biologists, working internationally, traveling with controlled drugs, and other topics related to working in the field. The AAWV workshop “Tools for Veterinarians in Wildlife Field Research” at the AAZV/AAWV Conference in Tulsa will complement the Guidelines and cover many of these topics in more detail (see the “Vice President’s Message” on page 1 for more information). The Guidelines have been submitted to the respective Boards of Governors and Advisory Councils of

the AAWV and AAZV for comment and approval. Once approved, the Guidelines will be posted on their respective websites. The Guidelines will be a “living document” and will be updated regularly based on input from CWHC members.

Speaking of websites, the “Member Spotlight” pages on the AAZV and AAWV websites were updated to feature Dr. Terry Norton and the Georgia Sea Turtle Center in Jekyll Island, Georgia. Please check it out, and contact the CWHC chairs (Drs. Chris Fiorello and Mark Cunningham) if you have ideas for other members and their projects to be posted on the websites.

The Guidelines will be a “living document” and will be updated regularly based on input from CWHC members.

National Fish and Wildlife Health Initiative Toolkit Available Online

The Association of Fish and Wildlife Agencies (AFWA) has released an updated National Fish and Wildlife Health Initiative Toolkit on-line, offering a collection of electronic resources to help wildlife management agencies assess their preparedness in addressing fish and wildlife health issues. The materials and documents include a copy of the National Fish and Wildlife Health Initiative along with a list of Steering Committee representatives. The toolkit contains information and sample language related to state and federal authorities in managing diseases in fish and wildlife, as well as an updated internal memo from USDA-APHIS-Veterinary Services (VS) describing VS’s animal health policy memo as it relates to wildlife. Also included are sample disease response plans and case histories of wildlife disease detection and response. Position descriptions for fish and wildlife health professionals and for state fish and wildlife health programs are included to provide guidance in developing or enhancing programs. Download a free PDF file of the toolkit at www.fishwildlife.org/about_comm_fwhealth_toolkit.html.

UC-Davis WAAM Hosts 15th Annual Symposium

Barbara A. VanGilder, student, UC Davis School of Veterinary Medicine 2012

On February 28th, The Wildlife and Aquatic Animal Medicine Club (WAAM) at the University of California Davis School of Veterinary Medicine held its 15th Annual Symposium. WAAM is a student club that promotes interest and learning opportunities for veterinary students interested in wildlife, zoological and aquatic medicine and was recently established as a student chapter of the AAWV.

This year's event, "Keeping the Wild," provided students, veterinarians, veterinary technicians and wildlife rehabilitators with a day of lectures and case studies specific to promoting the health of wildlife. Among the distinguished speakers were Davis's own Dr. Linda Lowenstine who spoke about wildlife pathology, Dr. Nicola Pussini of The Marine Mammal Center, and Dr. Jeffery Zuba of the San Diego Wild Animal Park who spoke about his project involving laparoscopic vasectomy of free ranging African elephants. For many of the attendees, seeing the endotracheal tube used to intubate elephants in the field and learning about the challenges and rewards of developing new

and innovative procedures was particularly interesting and inspiring.

First year veterinary student Megan Moriarity reflects, "I felt that [the symposium] provided a diverse perspective on wildlife medicine and on the contributions veterinarians can make to the field, the animals, humans, and the ecosystem as a whole. Each speaker had exciting stories and was very approachable and friendly. I particularly enjoyed the clinical applications that each speaker provided us. It really made me think about the practical and realistic approaches to wildlife concerns." She goes on to add "and the food was great!"

In the coming year, WAAM will continue to provide unique and exciting learning experiences for veterinary students while preparing for the 16th annual symposium. If you would like to learn more about WAAM and the WAAM Symposium, please visit <http://www.vetmed.ucdavis.edu/Clubs/WAAM/default.html>.

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The Wildlife Society Officially Recognizes Wildlife Diseases Working Group

The Wildlife Society (TWS) has formally recognized their Wildlife Diseases Working Group. This group was founded in 2005, and has grown steadily since its first meeting; as of April 2008 its enrollment totaled 174 members from 42 US States and five Canadian Provinces, and includes researchers, managers, professors and students with interests in every aspect of wildlife disease.

TWS Wildlife Diseases Working Group provides a forum for networking and communication among wildlife professionals interested in management, research, education, and administration of wildlife disease issues, and serves as a clearinghouse for information and expertise on wildlife

diseases for TWS members, government agencies, and other professional organizations. The goals of the Working Group are to enhance awareness and understanding of research and management on wildlife diseases and of how increased interactions between wildlife, humans, and domestic animals that result from globalization impact wildlife populations and human economies.

If you have any questions about or are interested in membership in TWS or its Wildlife Diseases Working Group, please contact the membership coordinator at membership@wildlife.org or call (301) 897-9770.

WILDLIFE DISEASE NEWS

AN AS YET UNDIAGNOSED DIE-OFF OF MEGELLANIC PENGUINS

ProMED (edited), March 2009

Chilean authorities are investigating the deaths of nearly 1500 Magellanic penguins found in late March 2009 at Caleta Queule in southern Chile. Experts from the University of Southern Chile (Universidad Austral) in Valdivia are working to determine the cause of mortality.

According to university veterinarian Roberto Schlatter, researchers are trying to establish the penguins' ages and from where the penguins had arrived in Caleta Queule. This can be difficult, as it is not unusual for penguins to migrate thousands of miles.

So far researchers are in the dark about what's killing the birds. Rodrigo Zambrano, a maritime official in Valdivia, said the penguins do not appear to be poisoned in any way. He said Magellanic penguins are periodically killed by fishing boat nets, but never by the hundreds. Four of the bird carcasses have been sent to Valdivia's Universidad Austral for testing.

Magellanic penguins are native to the waters around Chile and Argentina. Although they are not an endangered species, they are vulnerable to oil spills and, according to work done by Dee Boersma at the University of Washington, are susceptible to the effects of climate change: rising temperatures displace fish, forcing Magellanic penguins to swim an average of 25 miles further from their nests in search of food. The extra "commute" was also found to shorten their breeding period. Penguins have also been shown to be susceptible to malaria, influenza, and starvation, and to Newcastle disease picked up from chicken bones thrown out with the garbage from Antarctic research stations.



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M.D./ecology.org

LOOKING AHEAD

2009 AAWV Elections!

The AAWV will hold its biennial election for new officers later this year; ballots will be distributed in August, with votes due by the end of September and new officers installed at our annual business meeting in October in Tulsa, OK.

All AAWV members are encouraged to nominate themselves or fellow members as candidates for each of the four elected positions of our organization:

- President
- Vice-President
- Treasurer
- Secretary

The AAWV aims to give members the opportunity to choose between at least two candidates for each position. Current officers are encouraged to run for higher office.

Officer position descriptions are included in the AAWV By-Laws, which can be viewed on the AAWV website (www.aawv.net). Interested members should feel free to contact current officers with any questions about duties, responsibilities, and benefits of holding office!

The Nominations Committee (Kirsten Gilardi, Dave Jessup and Todd Cornish) will accept all nominations, and then verify the interest and willingness of each nominee before finalizing the slate.

Nominations are being accepted between now and August 1st, and should be sent to Kirsten Gilardi (kvgilardi@ucdavis.edu).

PUBLICATION OF INTEREST

CHEMICAL CONTAMINANTS, PATHOGEN EXPOSURE AND GENERAL HEALTH STATUS OF LIVE AND BEACH-CAST WASHINGTON SEA OTTERS (*ENHYDRA LUTRIS KENYONI*)

Brancato, M.S. et al. 2009. *Marine Sanctuaries Conservation Series ONMS-08-08*. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries.

Analyses of blood and liver samples from live-captured sea otters and liver samples from beach-cast sea otter carcasses off the remote Washington coast indicate relatively low exposure to contaminants, but suggest that even at the low levels measured, exposure may be indicated by biomarker response. Evidence of pathogen exposure is noteworthy – infectious disease presents a potential risk to Washington sea otters, particularly due to their small population size and limited distribution. During 2001 and 2002, 32 sea otters were captured, of which 28 were implanted with transmitters to track their movements, and liver and blood samples were collected to evaluate contaminant and pathogen exposure. In addition, liver samples from fifteen beach-cast animals that washed ashore between 1991 and 2002 were analyzed to provide historical information and a basis of reference for values obtained from live otters. The results indicate low levels of metals, butyltins, and organochlorine compounds in the blood samples, with many of the organochlorines not detected except polychlorinated biphenyls (PCBs), and a few aromatic hydrocarbons detected in the liver of the live captured animals. Aliphatic hydrocarbons were measurable in the liver from the live-captured animals; however, some of these are likely from biogenic sources.

A significant reduction of vitamin A storage in the liver was observed in relation to PCB, dibutyltin and octacosane concentration. A significant and strong positive correlation in vitamin A storage in the liver was observed for cadmium and several of the aliphatic hydrocarbons. Peripheral blood mononuclear cell (PBMC) cytochrome P450 induction was elevated in two of 16 animals and may be potentially related to aliphatic and aromatic hydrocarbon exposure. Mean concentration of total butyltin in the liver of the

Washington beach-cast otters was more than 15 times lower than the mean concentration reported by Kannan et al. (1998) for Southern sea otters in California. Organochlorine compounds were evident in the liver of beach-cast animals, despite the lack of large human population centers and development along the Washington coast. Concentrations of PCBs and chlordanes (e.g., *trans*-chlordanes, *cis*-chlordanes, *trans*-nonachlor, *cis*-nonachlor and

... 32 sea otters were captured, of which 28 were implanted with transmitters to track their movements...



Gerald and Buff Corsi © California Academy of Sciences

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[Editor's note: Pieces appearing in this section of the newsletter are publicly available abstracts or edited synopses of journal publications considered to be of special interest to AAWV members. All synopses have been approved by the authors and/or publishers for use in the AAWV newsletter. For full text, please refer to the cited source material. This edition's message: Be careful out there!]

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oxychlordanes) in liver of Washington beach-cast sea otters were similar to those measured in Aleutian and California sea otters, excluding those from Monterey Bay, which were higher. Mean concentrations of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethanes (DDTs) were lower, and mean concentrations of cyclohexanes (HCH, e.g., alpha BHC, beta BHC, delta BHC and gamma BHC) were slightly higher in Washington beach-cast otters versus those from California and the Aleutians.

Epidemiologically, blood tests revealed that 80 percent of the otters tested positive for morbillivirus and 60 percent for *Toxoplasma*, the latter of which has been a significant cause of mortality in Southern sea otters in California. This is the first finding of positive morbillivirus titers in sea otters from the Northeast Pacific. Individual deaths may occur from these diseases, perhaps more so when animals are otherwise immuno-compromised or infected with multiple diseases, but a population-threatening die-off from these diseases singly is unlikely while population immunity remains high. The high frequency of detection of morbillivirus and *Toxoplasma* in the live otters corresponds well with the cause of death of stranded Washington sea otters reported herein, which has generally been attributable to infectious disease. Washington's sea otter population continues to grow, with over 1100 animals currently inhabiting Washington waters; however, the rate of growth has slowed over recent years. The population has a limited distribution and has not yet reached its carrying capacity and as such, is still considered at high risk to catastrophic events.

INCIDENCE OF HEMORRHAGIC DISEASE IN VIRGINIA IS ASSOCIATED WITH WINTER AND SUMMER CLIMATIC CONDITIONS

Jonathan M. Sleeman, Jay E. Howell, W. Matthew Knox, and Philip J. Stenger. To be published in an upcoming edition of the journal EcoHealth

Hemorrhagic disease (HD), an important disease of white-tailed deer (*Odocoileus virginianus*), is caused by epizootic hemorrhagic disease or bluetongue viruses that are transmitted by midges of the genus *Culicoides*. Although this disease is predictable seasonally, it is difficult to predict its emergence annually. Previous studies of bluetongue virus indicate that climatic conditions are important for transmission. We conducted this study to determine if selected climatic conditions were associated with annual incidence of HD in white-tailed deer from Virginia. We calculated the annual percentage of deer with hoof wall growth interruptions (a clinical sign of chronic HD) harvested by hunters who participate in deer management assistance programs from counties in 4 climatic divisions east of the Blue Ridge Mountains (HD endemic area) from 1993 to 2006 and used those values as a standardized indicator of annual HD incidence. We obtained (from the University of Virginia Climatology Office database) monthly average temperature (°F) and total precipitation (inches) data for each of the climatic divisions for the same time period. We calculated Pearson's correlation coefficients between annual HD incidence and temperature or precipitation for each month, as well as for winter (January-February), early summer (June-July), and late summer/fall (August-September-October) seasons. We detected strong correlations between annual HD incidence and average temperature for winter ($r=0.39$, $P=0.003$, $n=57$), early summer ($r=0.51$, $P<0.0001$, $n=57$), and late summer/fall ($r=0.42$, $P=0.001$, $n=57$). There also was a strong inverse correlation between annual HD incidence and June

Don't Forget the AAWV Auction!

As you set off on your summer travels, don't forget your favorite professional organization! Handy pieces of equipment, works of art, leisure-time gear, professional services – whatever you've got, we'll take it! And keep the AAWV auction in mind while shopping for souvenirs, too!

If you're coming to the meeting this year, please try to bring something to donate; and if you can't make it to the meeting, you can still send an item! This is a great and easy way to support our organization. We will also need a few volunteers to accept auction items during registration and to help before and during the auction.

For more information, contact Christine Fiorello at (706) 254-8707 or drfiorello@gmail.com. See you in Tulsa!

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precipitation ($r=-0.44$, $P=0.0006$, $n=57$). To further explore these relationships, we developed Poisson regression models of seasonal temperatures and June precipitation to annual HD incidence. Based on Akaike's Information Criterion with small sample size correction (AICc), the global model emerged as the top model. Higher winter and summer temperatures may increase vector capacity and competence. In addition, less precipitation during June may create favorable breeding sites for midges and diminish food and water sources for deer, thus increasing physiological stress. Further studies at multiple spatial scales that include additional climatic factors are warranted.

SKIN LESIONS AND PHYSICAL DEFORMITIES OF COASTAL AND OFFSHORE COMMON BOTTLENOSE DOLPHINS (*TURSIOPS TRUNCATUS*) IN SANTA MONICA BAY AND ADJACENT AREAS, CALIFORNIA

Bearzi M., et al. *Ambio*. 2009. 38:2, pp. 66–71

Skin lesions and physical deformities on coastal and offshore bottlenose dolphins (*Tursiops truncatus*) were assessed during a photo-identification study conducted between 1997-2007 in Santa Monica Bay and adjacent areas, California. During 425 boat surveys, 647 individuals were identified based on marks on their dorsal fins. On 637 individuals examined for skin lesions and deformities, 79.0% exhibited at least one type of lesion. Offshore animals showed more lesions than coastal animals (offshore: 87.8%, $n = 209$; coastal: 73.4%, $n = 270$). Only one individual showed a physical deformity. Results show that skin lesions affect a large portion of the coastal and offshore dolphin populations in the study area. When considering that lesions and physical deformities can be a sign of disease and may be related to anthropogenic factors, their high presence on dolphins must be a cause of concern.



“... we developed Poisson regression models of seasonal temperatures and June precipitation to annual HD incidence.”

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SKIN DISEASES IN GUIANA DOLPHINS (*SOTALIA GUIANENSIS*) FROM THE PARANAGUÁ ESTUARY, BRAZIL: A POSSIBLE INDICATOR OF A COMPROMISED MARINE ENVIRONMENT

Van Bresseem, M-F., et al. 2009. *Marine Environmental Research*, 67: 63-68.

We report on the presence of lobomycosis-like disease (LLD) and nodular skin disease (NSD) in a community of Guiana dolphins (*Sotalia guianensis*) inhabiting the biologically and chemically contaminated Paranagua estuary (Brazil) and on their absence in the community living in the cleaner Cananeia estuary. Prevalence rates of LLD and NSD were 3.9% and 12.6%, respectively, in 103 photo-identified (PI) dolphins from the Paranagua estuary in the period 2006–2007. Adults and calves were affected. Lobomycosis-like lesions may be extensive and form large plaques. Skin nodules were sometimes ulcerated and associated with cutaneous traumas suggesting that traumatic

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injuries may play a role in the pathogenesis of this condition. In two adult dolphins, NSD evoked the beginning of LLD. In 1996–2007 none of the 200 PI *Cananea S. guianensis* had LLD or NSD, a highly significant difference. Interestingly, these dolphins were reported to harbour relatively low concentrations of organochlorines. LLD and NSD are possibly indicators of environmental changes.

OPPORTUNITIES

FISH HISTOPATHOLOGY TRAINING PROGRAM

The Ministry of Agriculture and Lands Animal Health Centre in Abbotsford, British Columbia, Canada is offering a one-year training program in fish histopathology. The program will provide the trainee the opportunity to: develop diagnostic expertise in fish histopathology through submissions to the Animal Health Centre under the supervision of a board-certified pathologist; develop expertise in writing and digital imaging through descriptions and publication-grade photography of cases from the Centre's Fish Histopathology Study Set; pursue an area of interest that might include development of a web-based resource for fish histopathology or publication of a case report from clinical submissions.

The Animal Health Centre is a full-service veterinary diagnostic laboratory certified by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). Ancillary diagnostic support includes immunohistochemistry, molecular diagnostics including DNA sequencing, PCR test development, and high-resolution digital photomicroscopy.

Start date will depend on the availability of the successful applicant, with a goal of October 1, 2009. Applications or inquiries should be addressed to Dr. Gary Marty at Gary.Marty@gov.bc.ca.

STAFF VETERINARIAN - NEW ENGLAND WILDLIFE CENTER

The New England Wildlife Center (NEWC) is seeking an experienced veterinarian to work collaboratively with the Chief Veterinarian/CEO in performing duties including clinical care and management of wildlife patients, managing the Center's Internship program, assisting in development and running of public educational programs, and other duties as staff veterinarian. The NEWC is a 501(c) 3 non-profit wildlife care and environmental education organization dedicated to the rescue, rehabilitation, and release of sick, injured and orphaned native wildlife. It is situated on 12.9 acres of land in a 22,000 square foot "green" building which includes a medical ward, an admissions room, surgery and radiology suites, holding wards, necropsy room, internship center with housing capability, food preparation, a hands-on nature center modeled after the Smithsonian, and administration offices.

To apply for this position, send cover letter addressing qualifications, resume, and three references to: Hiring Team, NEWC, 500 Columbian Street, South Weymouth, MA 02190 or email to gregoryamertz@yahoo.com. The expected start date for this position is August 1, 2009.

UPCOMING MEETINGS



July 11-14, 2009.

146th Annual Conference of the American Veterinary Medical Association.
Seattle, WA.
See <http://avmaconvention.org/> for more information.

July 11-16, 2009.

23rd Annual Meeting of the Society for Conservation Biology.
Beijing, China.
Click [here](#) for more information.

July 21-23, 2009.

3rd International Carcass Disposal Symposium.
University of California - Davis.
For more information click [here](#) or contact Mark Hutchinson by email at markh@umext.maine.edu or by phone at (207) 832-0343

July 22-24, 2009.

Third International Chronic Wasting Disease Symposium.
Park City, UT.
For more information contact Mary Conner, Utah State University, at mary.conner@usu.edu.

August 2-6, 2009.

WDA Annual Conference.
Blaine, WA.
More information at www.wildlifedisease.org/meetings.htm

August 17-18, 2009.

International Aquaculture Biosecurity Conference: Practical Approaches for the Prevention, Control, and Eradication of Disease.
Trondheim, Norway.
For more information go to www.iabconference.org.

September 14-18, 2009.

14th International Conference On Diseases Of Fish And Shellfish.
Clarion Congress Hotel,
Prague, Czech Republic.
Go to www.eafp2009.org for more information.

September 20-24, 2009.

The Wildlife Society 16th Annual Conference.
Monterey, CA.
Click [here](#) for more information.

October 7-14, 2009.

United States Animal Health Association Annual Meeting.
San Diego, CA.
Go to www.usaha.org/meetings for more information.

October 12-16, 2009.

Society for Marine Mammalogy 18th Biennial Conference on the Biology of Marine Mammals.
Quebec Conference Centre,
Quebec City, Canada For more information go to www.marinemammalogy.org

October 24-30, 2009.

AAW/AAZV Joint Conference.
Tulsa, OK. For more information go to www.aawv.net.

December 10-16, 2009.

Australasian Section Wildlife Disease Association and Wildlife Society of the New Zealand Veterinary Association.
South Otago, New Zealand.
Click [here](#) for more information.