



Colin Gillin, President

President's Message: Change is Good! Welcome and Thanks!

Just when we thought the era of sequestration and furloughs were becoming a normal event in wildlife employment, new opportunity seems to be increasing for those looking to enter the field. Since the recession started, Lindsey Long became the Wisconsin Department of Natural Resources wildlife vet and in the last 3 years, Aaron Hecht became Kentucky's Department of Fish and Wildlife vet as did Megan Kirchgessner for the Virginia Department of Game and Inland Fisheries. During this period, we also hired Julia Burco as a second vet with the Oregon Department of Fish and Wildlife. But it doesn't stop there. Over the last year several state wildlife agencies have added new vets to their ranks including Maria Palomar hiring on with the North Carolina Wildlife Resources Commission and Kelly Straka has taken on the wildlife veterinary duties for the Missouri Department of Conservation. Most recently, AAWV member and 2012 grad, Mary Wood was hired in July by my first employer, the Wyoming Game and Fish Department. Mary received her Bachelor's degree in Fisheries/Wildlife from the University of Minnesota then spent the next 5 years doing wildlife fieldwork. Returning to Minnesota, she earned her Doctorate in Veterinary Medicine with a focus on wildlife while also receiving her Master's in Public Health. What an exciting time to have a career in wildlife health with the new and emerging challenges of white-nose syndrome in bats, chytrid fungus in the world's amphibians, and continued spread of CWD while trying to come up with new ways to contain the threats of livestock diseases that spillover into wildlife such as brucella and TB. I know all of us in AAWV welcome and congratulate Maria, Kelly, and Mary and all the other new wildlife veterinarians and look forward to seeing you at our annual gatherings in Knoxville and Milwaukee this year.

There are lots of job related opportunities for wildlife vets to

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AAWV NEWSLETTER

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

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get out and network as we add our knowledge and experience to the efforts of wildlife managers and conservationists. We usually have a representative contingent of wildlife vets at the annual zoo vets meeting and I always see AAWV members at the AVMA convention and the US Animal Health Association meeting. However, our major gatherings are most notably at the Wildlife Disease Association meeting and more recently at the national meeting of the Wildlife Society. We are looking forward to seeing everyone in Knoxville at this year's WDA international conference. We will be meeting Monday for our annual business meeting and will hold a joint session with the WDA Wildlife Veterinary Section on Raising the Bar for Animal Care in Wildlife Capture and Field Anesthesia. We are also meeting in October in Milwaukee as we hold another joint meeting with the Wildlife Society where we will be chairing a session on Wildlife Disease and Toxicology and hold a members meeting to introduce our new President, and officers. AAWV, through the American College of Zoological Medicine, will be providing veterinary continuing education credits at both of these great wildlife venues. We hope to see everyone at either or both meetings!

The latest opportunity for AAWV members has been offered by the US Animal Health Association President, Dr. David Meeker. AAWV is an allied organization member of USAHA and as a result, we were offered a \$1,000 student travel scholarship to the annual USAHA meeting in San Diego. The USAHA scholarship is offered in partnership with the Center for Public and Corporate Veterinary Medicine through the Virginia-Maryland Regional College of Veterinary Medicine to help increase veterinary student exposure and interest in public and regulatory veterinary medicine. Two of our AAWV student members expressed interest and applied for this opportunity and the selection will be announced by the AAWV Board of Governors by August 1st.

Finally, I would like to thank the AAWV membership for your support of the association and its leadership. It has been a very interesting time in wildlife health and being on the inside of many issues has tremendously broadened my appreciation for the importance of AAWV to be an influence in decisions made concerning our field. I encourage each member to participate in committees and run for office when the opportunity presents itself. I would also like to particularly

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62nd International Conference of the Wildlife Disease Association, 2nd International Symposium on Ranaviruses, and 2013 American Association of Wildlife Veterinarians Meeting Event Guide

July 27-28 (Sat - Sun)	<p>Ranavirus Symposium Website</p> <p>Presentations 0815 to 1730 in Medallion Room</p> <p>See website for location of discussion sessions</p> <p>Poster Session and Social 1800 July 27 Tennessee Ballroom</p> <p>Workshops 0700 to 1600 July 29</p> <p>Student Workshop—Overnight in the Great Smoky Mountains National Park (N. P.)</p>
July 28 (Sun)	<p>Workshops: Intro to Population Wildlife Disease Modeling 1000 to 1500</p> <p>White Nose Syndrome (surveillance, sampling, ecology, wet lab) All day</p> <p>ACZM Short Course 0800 to 1700</p> <p>Editorial Board Meeting (AM)</p> <p>WDA Council Meeting (PM)</p> <p>Ice Breaker (Evening)</p>
July 29 (Mon)	<p>Welcome session: Ranavirus Symposium overview (Greg Chinchar)</p> <p>Al Franzman Memorial lecture: David Stallknecht, Hemorrhagic Disease and the many meanings of no-se-um</p> <p>WDA business lunch</p> <p>General talks (conference theme) (PM)</p> <p>Photo contest</p> <p>AAWV business meeting (1700 to 1800)</p> <p>Student-Faculty mixer (beginning at 1830)</p> <p>Ranavirus symposium workshops (will be repeated on Wed)</p>
July 30 (Tues)	<p>Student presentations and student poster session (AM and PM)</p> <p>WDA Wildlife Veterinary Section (1700 to 1800)</p> <p>Auction at IJAMS Nature Center (Evening)</p>
July 31 (Wed)	<p>Concurrent sessions (AM)</p> <p>Workshops: Using turtle dogs for surveillance and health assessments</p> <p>Ranavirus sampling in Great Smoky Mountains N. P.</p> <p>Herpetofauna Necropsy</p> <p>Field trips: Cades Cove and Abrams Falls, Great Smoky Mountains N. P.</p> <p>Whitewater rafting on the Pigeon River, Hartford, TN</p> <p>Knoxville Outdoor Adventure and other local attractions</p>
Aug 1 (Thurs)	<p>Concurrent sessions and contributed poster sessions (AM and PM)</p> <p>Banquet, Awards Ceremony, Dance</p>
Aug 2 (Fri)	<p>Raising the Bar for Animal Care in Wildlife Capture and Field Anesthesia sponsored by AAWV and WVS (AM)</p> <p>Adjourn (noonish)</p>



[Conference website](#)



California Sea Lion Unusual Mortality Event

In January 2013, NOAA declared an unusual mortality event for California Sea Lions (*Zalophus californianus*) in five California counties. An increased number of strandings in juveniles was detected in January and intensified throughout the spring. As of May 31st, the number of strandings along Los Angeles, Orange, San Diego, Santa Barbara, and Ventura coastlines was four to six times the average for the past five years (see figure). The pups born in 2012 are emaciated, and dehydrated. Those found alive have been taken to rehabilitation centers. Biological samples have been collected from carcasses as well as the rescued pups. As part of the UME response, an investigative team has been assembled to review the data. Researchers are considering infectious diseases, pollutants and toxicants, and weather associated events as potential causes of the mortality event.



California Sea Lion
(*Zalophus californianus*)
Photo: NMFS National Marine Mammal Laboratory

Comparison with Historical Stranding Rates, Jan-May 2008-2012

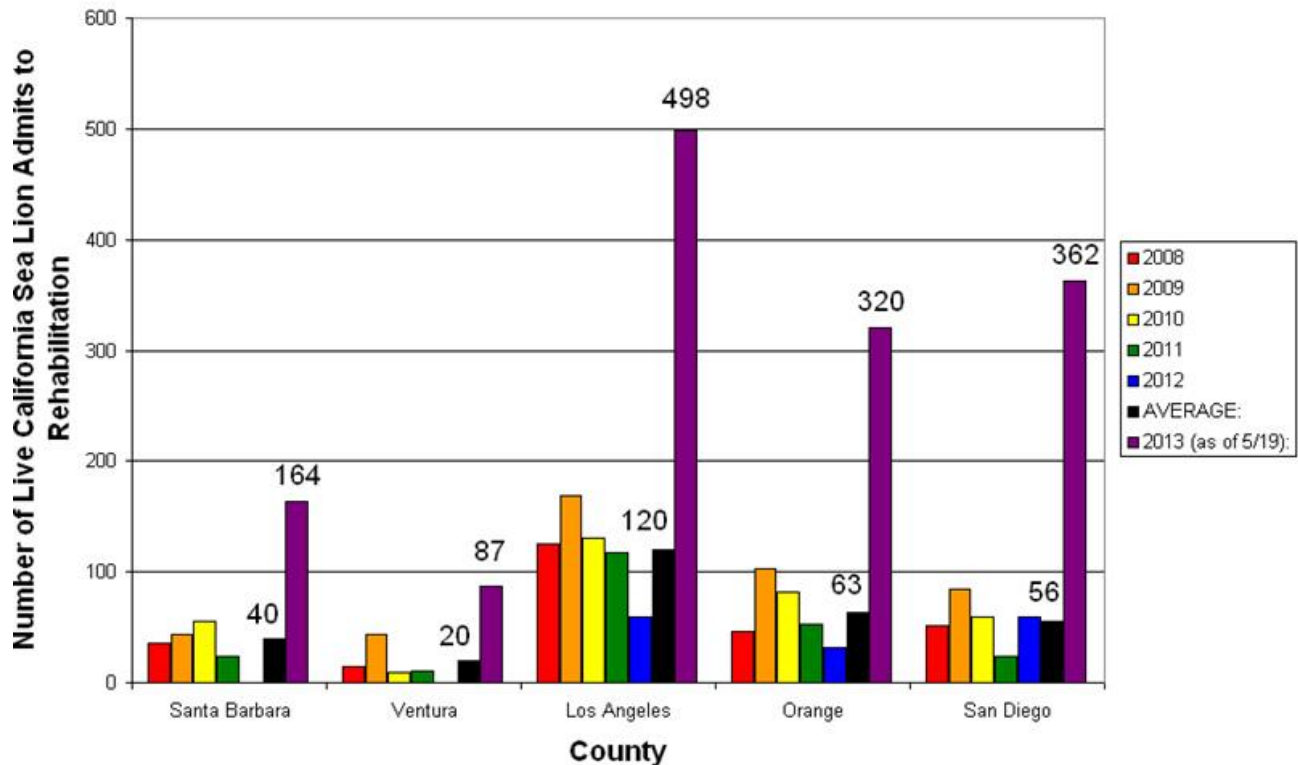


Figure: Live California sea lion historical stranding rates for 2008-2012 (admits to rehabilitation facilities from Jan 1-May 31). Data for 2013 is as of May 19, 2013.

Source and for more information: [NOAA National Marine Fisheries](http://www.noaa.gov)

The Veterinary Mobility Act: What does it mean for wildlife veterinarians, wildlife management and research?

by Anne Justice-Allen

First, a disclaimer, I'm not a lawyer or a Drug Enforcement Agency (DEA) representative so everything in this article about how the proposed amendments to the Controlled Substances Act (CSA, 21U.S.C.) might affect wildlife management and research is speculation on my part. But I have been involved in discussions regarding the CSA and the current state of its enforcement by the DEA for over a year. I have spoken with DEA agents regarding that enforcement and how what we do and the way we do it is viewed by the agency.

What is the Veterinary Mobility Act? There are actually two identical bills proposing to amend the CSA, one in the House (H.R. 1528 by Schrader [D-OR] and Yoho [R-FL]) and one in the Senate (S. 950 by Moran [R-KS] and King [I-ME]). The amendment is to Section 302(e) of the Controlled Substances Act (21U.S.C. 822(e)), "Persons required to register." Paragraph (e) which addresses separate registration will be changed from:

"A separate registration shall be required at each principal place of business or professional practice where the applicant manufactures, distributes, or dispenses controlled substances or list I chemicals"

to: "(e)(1) A separate registration shall be required at each principal place of business or professional practice where the applicant manufactures, distributes, or dispenses controlled substances or list I chemicals(2) Notwithstanding paragraph (1), a registrant who is a veterinarian shall not be required to have a separate registration in order to transport and dispense controlled substances in the usual course of veterinary practice at a site other than the registrant's registered principal place of business or professional practice, so long as the site of dispensing is located in a State where the veterinarian is licensed to practice veterinary medicine."

The goal of this amendment is to legalize the transportation and dispensing of controlled substances by ambulatory practitioners to their patients and owners at farms and residences away from their registered location. It will also apply to wildlife veterinarians administering drugs to wildlife. What remains unclear is how long a practitioner will be permitted to hold or transport drugs away from a registered location? Do research activities qualify as practicing medicine? What if the registration is not a practitioner registration but a researcher registration?

A number of us have looked at this issue and we remain concerned that this amendment does not go far enough. In my view, recent developments in the enforcement of the CSA by the DEA stem from the agency shifting from the intent of the act to a literal interpretation of the language and some misinterpretation of the language.

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The act was intended to prevent the diversion of potentially dangerous drugs that were likely to be abused from legitimate medical uses to illegal and inappropriate use. This amendment does not address the possession, transportation, and administration to wildlife of controlled substances by unlicensed individuals that are employed by universities as field researchers or by state or federal agencies as wildlife managers or researchers. The amendment will help some but it all depends on how DEA interprets and enforces the change.

What is the current status of each bill and where are they going? Senate bill 950 has been read twice and referred to the Senate Committee on the Judiciary. It does not have any democratic sponsors which is a problem. It isn't on the calendar for a hearing at this time. House rule 1528 is doing a little better. It now has 88 sponsors, and pretty good bipartisan support. The bad news there is that it was referred to two Committees, Judiciary and Commerce, and has been referred to a subcommittee in each of those, Crime, Terrorism, Homeland Security and Investigations, and Health, respectively.

What else is being done? A meeting has been scheduled in one of the DEA regions between representatives from DEA and wildlife agencies. The Association of Fish and Wildlife Agencies, many of the regional associations, The Wildlife Society, AAWV, and many individual agencies have legislative liaisons and other representatives watching these bills. Liaisons are talking with representatives from the offices of the sponsors regarding the issue and about specific concerns of wildlife veterinarians, and fish and wildlife management agencies. Please get involved and voice your concerns to your legislator and senator.



Identification of a Novel Cetacean Polyomavirus from a Common Dolphin (*Delphinus delphis*) with Tracheobronchitis. Anthony SJ, St. Leger JA, Navarrete-Macias I, Nilson E, Sanchez-Leon M, et al. 2013. PLoS ONE 8(7): e68239. doi:10.1371/journal.pone.0068239

Abstract

A female short-beaked common dolphin calf was found stranded in San Diego, California in October 2010, presenting with multifocal ulcerative lesions in the trachea and bronchi. Viral particles suggestive of polyomavirus were detected by EM, and subsequently confirmed by PCR and sequencing. Full genome sequencing (Ion Torrent) revealed a circular dsDNA genome of 5,159 bp that was shown to form a distinct lineage within the genus Polyomavirus based on phylogenetic analysis of the early and late transcriptomes. Viral infection and distribution in laryngeal mucosa was characterised using in-situ hybridisation, and apoptosis observed in the virus-infected region. These results demonstrate that polyomaviruses can be associated with respiratory disease in cetaceans, and expand our knowledge of their diversity and clinical significance in marine mammals.

AVMA Update
Dave Miller

Recent AVMA Exec. Board actions of interest to AAZV and AAWV:

(1) Revise Animal Welfare Committee entity description to designate zoo/wildlife position on the committee as AAZV/AAWV-approved.

(Means that the AWC rep is now officially a joint association appointment, rather than a general zoo and wildlife position)

(2) Revised policy on elephant guides and tethers-approved: The AVMA condemns the use of guides to puncture, lacerate, strike or inflict harm upon an elephant. Elephant guides are husbandry tools that consist of a shaft capped by one straight and one curved end. The ends are blunt and tapered, and are used to touch parts of the elephant's body as a cue to elicit specific actions or behaviors, with the handler exerting very little pressure. The ends should contact, but should not tear or penetrate the skin.

The AVMA recommend tethers be used only for the shortest time required for specific management purposes. Tethers provide a means to temporarily limit an elephant's movement for elephant or human safety and well-being. Tethers can be constructed of rope, chain, or nylon webbing, and their use and fit should not result in discomfort or skin injury. Forelimb tethers should be loose on the foot below the carpal joint, and hind limb tethers should fit snugly on the limb between the tarsus and knee joints. Tether length should be sufficient to allow the elephant to easily lie down and rise unless required for medical procedures for a limited period. The AVMA also recognizes that shorter or otherwise modified tethers may need to be applied for a limited period of time to perform medical procedures safely.

Guides and tethers are used for training elephants in some elephant management

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thank the AAWV Board of Governors, Vice President Margaret Wild, Secretary Peri Wolff, Treasurer Mark Drew and Immediate Past President, Jonathan Sleeman, and all the members of the Advisory Council for your help and advice during an exciting and challenging 4 years. I look forward to the future of AAWV and know that the new leadership will carry out our mission, meeting the challenges with opportunity for a better understanding of wildlife and conservation and as the voice of wildlife health in North America.

Thanks



White Mountain Bear Tracks—K. Justice

AVMA updated, contd.

systems, and appropriate training is important for facilitating veterinary care. However, guides and tethers should only be used in a manner consistent with the promotion of optimum welfare of the elephant.

Personnel using these devices should be trained adequately, as well as introduced to alternative management systems.

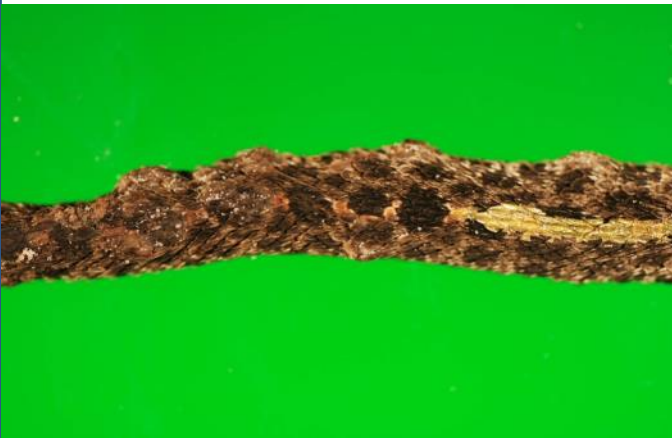
(3) A recommendation from the Committee on Environmental Issues to establish a policy on lead-based fishing tackle and ammunition used for hunting was disapproved.

Snake Fungal Disease

Snake fungal disease (SFD) has been identified as an emerging disease in wild snakes in the eastern and Midwestern United States. The National Wildlife Health Center (NWHC) and other diagnostic laboratories have consistently isolated the fungus *Ophidiomyces* (formerly *Chrysosporium*) *ophiodiicola* in association with SFD but often additional fungi are isolated as well. Evidence that *O. ophiodiicola* causes SFD is inconclusive at this time.

The NWHC has confirmed fungal dermatitis or the suspected pathogen in association with skin lesions in wild snakes from nine states (Illinois, Florida, Massachusetts, Minnesota, New Jersey, New York, Ohio, Tennessee, and Wisconsin). It is suspected that the disease syndrome is much more widespread. Multiple species are affected ranging from crotalids (timber rattlesnake, pygmy rattlesnake, and massasauga) to colubrids (northern water snake, eastern racer, rat snake, and milk snake).

Clinically, the snakes have scabs or crusty scales, subcutaneous nodules, abnormal moulting, cloudiness of the eyes not associated with moulting, or localized thickening of the skin. Ulcers of the skin and swelling of the face have also been documented. The disease has been associated with mortality but population level effects are difficult to ascertain due to the secretive nature of snakes and the general lack of long-term population data. In New Hampshire, clinical signs have been detected in a population of timber rattlesnakes that has declined 50% from 2006 to 2007.



Pygmy rattlesnake (*Sistrurus miliarius*) with multiple raised lumps (nodules) and crusty scales, captured in Volusia County, Florida, in October 2012. Photograph by D.E. Green, USGS National Wildlife Health Center.



Milk snake (*Lampropeltis triangulum*), Westchester County, New York, February 2013 (case 24281). Photograph by D.E. Green, USGS National Wildlife

Health Center. Several agencies and organizations, including the NWHC, are working to investigate the impacts of this disease. Conservation agencies and natural resource managers are encouraged to contact the NWHC if snakes with signs consistent with SFD are encountered. (paraphrased from the NWHC bulletin 2013-02, April 22, 2013)

To report a wildlife mortality event or request assistance, visit NWHC [web-site](#).

Final report released: Agency Capacities to Detect and Respond to Disease Threats: Professionals' Views on Limiting Factors and Action Priorities

This publication describes the findings of the third stage of a comprehensive assessment of the capacity of state fish and wildlife agencies (SFWA) to detect and respond to a disease threat in wildlife. The first two phases consisted of establishing a conceptual framework, characterizing current capacities, and identifying key traits that would be present in an ideal SFWA. In the third phase, the authors focused on identifying factors limiting SFWA capacity, tangible and intangible, and then prioritized the factors in terms of agency response. The authors used online surveys, and direct interviews to conduct all three stages of their research. Of the 253 professionals contacted, 64% responded and completed a portion or all of the survey. Most (67%) of the respondents were employed by SFWA and the remainder were from various federal, non-governmental, and university organizations. The responses of the SFWA employees were compared to those in the other groups. The full report is available online through a Cornell University website (linked below).

Eight statements in three categories, funding, legitimation, and staffing, were ranked by 50% or more of the respondents as limiting SFWA capacity. These led directly to 14 identified action items. To summarize, funding for wildlife health initiatives should be increased, maintained at a stable level, and yet still be flexible enough to respond to unusual disease events. Disease management actions may result in negative consequences either politically or in terms of public support, and leadership needs to be prepared to openly address these issues. Agencies should staff a dedicated unit for wildlife health and disease management, and should strive to retain qualified individu-

als. Strategic response plans should be developed, and supported by policies and procedural protocols. Interagency coordination should be improved by building communication networks, working relationships, and improving existing and creating new interagency agreements for response. Resources should be secured by diversifying the funding base through new coalitions and partnerships. Staff training, database development, and funding surveillance are key management components that need to be instituted. The public trust should be maintained through open communication in common language that details the management decision making processes and their foundation in science and research.

Siemer, W. F., T. B. Lauber, D. J. Decker, and S. J. Riley. 2013. Agency capacities to detect and respond to disease threats: Professionals' views on limiting factors and action priorities. [Human Dimensions Research Unit Series Publication 13-5](#). Department of Natural Resources, Cornell University, Ithaca, NY. 46pp.



Plum Island wildlife—A. Justice-Allen



UPCOMING MEETINGS

Sept. 8	to	Sept. 11	103rd Annual Conference , American Association of Fish and Wildlife Agencies, Portland, OR, USA
Sept. 16	to	Sept. 19	12th Biennial Conference on the Colorado Plateau, Flagstaff, AZ, USA
Sept. 17	to	Sept. 20	31st World Veterinary Congress, Prague, Czech Republic
Sept. 18	to	Sept. 21	International Conference on Behavior, Physiology, and Genetics in Wildlife, Berlin, Germany
Sept. 19	To	Sept. 22	1st Annual Conference , WDA Latin America, Sao Paulo, Brazil
Sept. 22	to	Sept. 27	Society for Vector Ecology 6th International Congress , La Quinta, CA, USA
Sept. 28	to	Oct. 4	American Association of Zoo Veterinarians , Salt Lake City, UT
Sept. 30	to	Oct. 4	Australasian WDA Section : Grampians, Victoria, Australia,
Oct. 5	to	Oct. 9	The Wildlife Society 20th Annual Conference, Milwaukee, WI, USA
Oct. 13	to	Oct. 16	Southeastern Association of Fish and Wildlife Agencies , Oklahoma City, OK, USA
Oct. 17	to	Oct. 23	American Association of Veterinary Laboratory Diagnosticians and United States Animal Health Association, San Diego, CA, USA
Oct. 28	to	Nov. 2	Managing infectious disease in conservation programs , Durrell Cons. Academy, Channel Is, UK
Nov. 11	to	Nov. 15	Human Wildlife Conflict Workshop , Whiterock Conservancy, Coon Rapids, IA, USA

South Padre Island—A. Justice-Allen



*Please submit items for the next newsletter to the editor at ajustice-allen@azgfd.gov by **September 1st***