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Aquatic Vet News

World Aquatic Veterinary
Medical Association

Volume 4; Number 3

3rd Quarter 2010

WAVMA OFFICER NOMINATIONS STILL OPEN

Have you ever aspired to be a leader in aquatic veterinary medicine and pave or blaze the way forward in aquatic veterinary medicine, or do you know someone who really fits this billing? Now is your chance!

The Executive Board has decided to keep the nomination process for 2011 Officers and Directors-at-large open until midnight (GMT) September 30, 2010. Currently any full member in good standing (2010 membership dues are paid) can run for the following positions for the 2011 Executive Board (January 1 – December 31, 2011):

- **President-Elect**
- **Secretary**
- **Treasurer**
- **Director-at-Large** (2 positions)

Please take this opportunity to offer yourself or encourage other suitable individuals to **fill out, and submit the nomination form on the WAVMA website by September 30, 2010.**

All nominations should be e-mailed to the WAVMA Parliamentarian -

dscarfe@ameritech.net

After the elections, the elected Officers and Directors will participate as non-voting members of the Executive Board through December 31, 2010, and will assume their 2011 positions January 1, 2011.

With input from numerous Committees, the Executive Board collectively oversees WAVMA's administration, and sets the direction of current and future WAVMA programs, membership services, and other initiatives. Please consider running for one of these positions and using your enthusiasm, expertise, leadership and innovation ideas to advancing WAVMA's mission and objectives, and strengthening the discipline of aquatic veterinary medicine.

New nominees will be added to the slate of nominations already received and brief biographical information will be distributed with the ballots for you to cast your vote around October 1.

Voting for these positions will be open until October 31 and elected officers will be able to participate in Board meetings as observers until December 31, and will assume their positions as voting Executive Board members on January 1, 2011.

Inside this issue:

Editor's Note	2
Article Index	2
Executive Reports	3
WAVMA Committees	5
Literature Review	10
Colleague's Connection	11
Clinical Reports	12
Emerging Issues	15
Legislative & Regulatory Issues	16
Aquatic Education	18
Aquatic Veterinary Opportunities	24
AGM Photo Album	26
Contact Corner	28
Executive Board and Committee Chairs	28
Membership Application	29
Click on topic to skip to that page	



Contributors to this issue of *Aquatic Vet News*:

Erdem Danyer
David Scarfe
Chris Walster
Julius Tepper
Devon Dublin
Richmond Loh

Editor's Note

In this issue, you will see great information contributed by members Richmond Loh in Australia, Erdem Danyer from Turkey, and Devon Dublin in Japan. You may remember that Drs. Loh and Dublin also contributed articles to the last issue. We met Dr. Danyer from Turkey at the WAVMA meeting in Greece. He was gracious enough to provide us with an article for this issue concerning an interesting case on which he is working. What a great pleasure it was to meet him, along with other veterinarians from Europe, Asia, Africa and of course North America at the Annual General Meeting. That is what this organization is all about. Bridging the world to provide information to veterinarians involved in aquatic animal medicine.

The articles provided in this issue are interesting and informative. The author veterinarians volunteer their efforts to help others anywhere in the world. More help from your colleagues is just an email away, or other news and information can be found on our new WAVMA website. All this at the tips of one's fingers—with the aid of a computer. But still, it is nice to actually meet other veterinarians face to face and socialize over a glass of beer, or the last bottle of Port. That is where true friendships are forged—in person, rather than over the computer. That is why I would encourage all WAVMA members to take the time to come to the meetings when they can. We should also plan on have WAVMA get together in any other veterinary conferences where our members may attend. Let's all plan on meeting together soon.

Nick Saint-Erne, DVM

Aquatic Veterinary News Editor

saint-erne@Q.com

Articles in this Issue

[Risk Factors Associated With Cataracts and Lens Luxations in Captive Pinnipeds](#).....10

[Fish Biochemical Markers as a Tool for Pollution Assessment](#).....10

[Historical Marine Research In Japan](#)11

[Tom and Miša, Two Male Bottlenose Dolphins](#).....12

[What's Killing Farmed Salmon?](#).....15

[Pathogenic Bacteria Discovered in Clams](#).....15

[Sernapesca Increases Measures to Protect Salmon](#).....16

[News from Oceania: Australian Importation Regulations](#).....16

[New WVA Veterinary Schools and Faculty Database](#).....27

Click on the Article to jump to that page.

Aquatic Veterinary News

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saint-erne@Q.com

Executive Reports

President-Elect's Report

Vision for 2011

Having just returned from our Conference in Greece, I am sitting and writing my report while my reflections on the week are still vivid. It was truly a wonderful opportunity to meet our President and her colleagues in person, after so many months of meeting virtually through Skype. Equally pleasurable was the chance to meet new friends and renew old acquaintances while experiencing ancient Athens and the Greek Isles. Our conference hotel, the Divani Palace Acropolis, a short walk away from the historical site, was an added pleasure. The rooms were beyond my expectations for even a 5 star hotel, having passed my wife's white glove test with flying colors. It was there that after two days of scientific presentations from speakers from around the world, we held our Annual General Meeting. I gave my President-Elect's Vision address, the text of which is following. Thanks again to all those involved that made it happen.

It is a real honor to be taking the reins as WAVMA President for the next year. It has been a pleasure to work with the core group to build the framework of our organization from its inception in 2006 to the present. I would like to take this moment to recognize several people who in my opinion have worked above and beyond all expectations to see our organization develop and grow. Dusan Palic, for his continuous work for several years as our financial officer as Treasurer; Nick Saint-Erne, for his tireless work as editor of our newsletter; Chris Walster, for his role as our official spokesperson as Secretary and also for volunteering to serve on numerous committees and focus groups and Dave Scarfe, who has been the glue that has cemented our organization together. Although as an organization we have not yet designated an award for WAVMA Outstanding Person of the Year, I would have to concede that slot to Dave every year we have existed. From the whole membership, I would like to personally and publically thank you all. I look forward to continuing to work with you in the future.

On a personal level, having experienced the satisfaction of working with colleagues in organized veterinary medicine on a local level, then later on, on the Executive Board of the IAAAM, I appreciated the benefits such an organization could play and sensed the need to fill a void in not having an organized aquatic veterinary association. In personal conversations with many of our now founding members, it became evident they too shared the desire to create what is now WAVMA. Thus are the roots of our young organization. What do I see as my vision for the next year? I would like to say to you that we can sit back and watch our many ideas progress to maturity without

input of time or effort.

Unfortunately, this is not the case. Many of our most active members have been burdened by the demands of our "real" jobs. If we had the resources, a full time paid Executive Director would be the key to help overcome this problem. But as a young organization, we don't have the income stream to support this. The answer, as I see it, is to involve new members in a strong and active committee structure. To this end, I will push to see all our standing committees meet throughout the year. Furthermore, I will recommend that with their application, all new members must indicate a committee choice on which to serve.

I have heard it said that increasing membership should be a prime objective. I personally feel that a smaller, more influential, more informed, more involved membership will lead to a stronger organization. At the heart of this must be a new, upgraded website to allow the membership to access both scientific and member support information. I hope to be able to fully deliver on this vision. I will ask your assistance and require your cooperation. I thank you all in advance.

Dr Julius Tepper (USA)

President-Elect

cypcarpio@aol.com

WAVMA New Members

Members are the life-blood of any professional Association. Please join us in welcoming the following new members:

Full Members:

Roger E. Kragstad (USA)
 Mehdi Soltani (Iran)
 Bedan M. Masuruli (Tanzania)
 Min Suk Joo (South Korea)
 Thomas Jacobs (USA)
 Stanley Smith (Thailand)
 Audrey A. Keller (USA)
 Marcus J. Webster (USA)

Student Members

Katharine L. Holder (USA)
 Samara L. Parker (Canada)
 Anthony Weaver (USA)

Secretary's Report

WAVMA's Elections and AGM

The Executive Board agreed to postpone this year's elections until after the AGM. Details on how to become an officer of the association and the elections can be found elsewhere in this edition of the AVN.

Copies of the presentations given at the 2010 WAVMA conference and proceedings including abstracts received are now available on the WAVMA conference website – see the link on the www.WAVMA.org home page.

After several promises it now looks as if the new website will be up and running by the end of the year. Those of you who have visited the conference site will already have a good indication as to how it will look but there is an article on the new website in this edition of the AVN.

The conference was a great success, excellent education and accommodation, friends renewed and made along with some wonderful culture. The smaller than expected number of people was somewhat disappointing, although I know around 20 people who could not attend through failing to arrange a visa in time. The only other downside to the trip was how exhausting it all was, although that can be put down in my case to the consumption of too many late night whiskies whilst discussing aquatic veterinary medicine!

Was it all worth it? In my case the answer is yes – getting to meet veterinary colleagues from four continents, learning about numerous facets of aquatic veterinary medicine and being able to talk to colleagues from around the world and realising yet again that we all face pretty much the same issues was very rewarding. As one delegate described it, “we had a blast”.

So for those of you who missed it, make a note in your diary for next year's conference which will be held in conjunction with the World Veterinary Congress in Cape Town, South Africa during the month of October. The plan is to have 2-3 days of lectures followed by 2-3 days of a biosecurity workshop. Not only will this demonstrate WAVMA's commitment to aquatic veterinary education once again, but also demonstrate to those outside of the profession the veterinary involvement in aquaculture. Watch this space for further details and I would encourage all of you to attend. As with the Athens conference, I suspect there will be opportunities to network with colleagues and that families will also have a great time.

Shortly after Athens, my family and I had a couple of weeks in a cottage just south of Oban, on the west coast of Scotland. An area renowned for its natural beauty and also its seafood gathered from local pristine waters. The inshore fisheries are largely based on crustacea, shellfish and cephalopods, whilst aquaculture is nearly all salmon and mussels. Along with tourism, these both account for a

large part of the local economy.

With numerous scenic islands and plenty of wildlife, there are lots of boat trips on offer along with some for the more adventurous, such as a trip to the Corryvreckan whirlpool, said to be the third largest of its kind in the world, although I felt the trip was nothing more than an excuse to get drenched in lots of very cold water. The wildlife trips are recommended with the chance of seeing whale, basking shark, dolphin, and porpoise, as well as birds such as the sea eagle (also called the erne).

On one trip, when passing a salmon farm of four net pens, our guide stated, “the rusting hulk you can see on your right is a salmon farm, which we don't want here. It can hold four hundred thousand salmon but is currently fallow for two years due to the pollution the farm produces, equivalent to the town of Oban [according to Wikipedia stable population of around 8000 rising to 25,000 in the summer]. On the rocks to the right is a family of common seals, which spend twenty two hours a day basking on the rocks where the ultraviolet rays from the sun kill the sea lice attached to their skin”. [I didn't know the sun was out for 22 hours a day!] To me there are numerous contradictions and inaccuracies in these comments which I tried to point out since one of the important roles of being a vet is education.

Why is there such a negative attitude to some aquaculture operations particularly given the state of world fisheries and an increasing population? Aquaculture is a necessity if we are to continue to eat seafood and it is not that long ago when salmon was an expensive luxury and not the relatively cheap healthy meal it is today. Tucking in to a plate of langoustines later that day, I pondered on why they looked much smaller than even five years ago – maybe it was coincidence but I started wondering how many years it would be before the fishery was depleted and they were all farm produced?

Chris Walster BVMS MVPH MRCVS

WAVMA Secretary

chris.walster@onlinevets.co.uk

Photo of Chris sailing
The Mediterranean Sea



WAVMA Committee Reports

Meetings Committee

WAVMA Booth at the 2010 AVMA Convention



WAVMA members (from left – Diane McClure, Kirstin Kamps, Scott Weber and Barry Baker) promote aquatic veterinary opportunities to veterinary colleagues at the combined WAVMA/AVMA booth at the 2010 AVMA Annual Convention in Atlanta, Georgia, USA.

Photo credit: Diane McClure

The WAVMA booth is presented in the picture above at the AVMA convention in July. In addition to the AVMA and the WAVMA convention in Greece (below), the WAVMA booth was also exhibited at the 6th International Symposium on Aquatic Animal Health in Tampa, Florida in September.

Dr Julius Tepper

Meetings Committee Chair

cypcarpio@aol.com



Communications Committee Report


Finally it looks as if the new website will go live within the next couple of months and most of you will be aware that it has been in development for over a year. Indeed, the current website was only meant to be temporary, so in some respects it has taken over three years. Those of you who have looked at the conference website will already have a flavor of its appearance and this article should introduce you to some of the intent and function of the new website.

It might be appropriate to firstly explain why it has taken so long. The Executive Board initially spent a lot of time discussing the needs and the functions of the website. Clearly the cost had to be justified and it must be of benefit to WAVMA members. These discussions set out what WAVMA hoped to achieve and also the level of technology needed to provide these functions. At this point, the project was sent to the Communications Committee, whose job was to draw up a web map detailing the content and function of each page, which also needed to be intuitive so members or the public could easily find the information they wanted. As WAVMA is international, this was actually quite a large task in itself as what someone in Asia calls intuitive is different to those in Europe or North America.


Earlier this year the web map was sent to our commercial designers and a group of WAVMA members who will be involved in the maintenance of the site once it goes live. Hopefully, when the site goes live, all of this time and effort will be justified, not only in the profile it presents of WAVMA or in the benefits in being a member, but also in the ease with which it can be maintained and updated – something incredibly important if it is not to become a white elephant, as can so easily happen.

Each page has an identical “design” with the top consisting of the logo, the ribbon with the seven main areas of the site and the four quick links at the top right of the page, which includes a site map search function and contact information.

[Contact](#) [Feedback](#) [Members login](#) [Site A-Z](#)




[HOME](#) [MEMBERS AREA](#) [WAVMA NEWS](#) [PUBLICATIONS](#) [ABOUT WAVMA](#) [LINKS](#) [CONTINUING EDUCATION](#)





The World Aquatic Veterinary Medical Association is a non-profit professional association devoted to supporting it's members and advancing the practice of aquatic veterinary medicine.

Latest News



Communications Committee Report

The middle of the screen area holds the page content, along with links to subsections of the area you are in. The concept is that there will be a maximum of around 200-300 words of introductory text which would include links to any supporting documents.

<p>Sponsors</p>  <p>Visitor locations</p> 	<p>HOME</p> <p>WAVMA's Mission & Objectives</p> <p>Formed in 2006 as a global not-for-profit Professional Association, the Mission of the World Aquatic Veterinary Medical Association is to serve the discipline of aquatic veterinary medicine through enhancing aquatic animal health and welfare, public health and seafood safety, to support aquatic veterinarians, aquatic animal owners and industries, and other stakeholders.</p> <p>To fulfill this Mission the World Aquatic Veterinary Medical Association seeks to:</p> <ol style="list-style-type: none"> 1. Serve aquatic veterinary medicine practitioners of many disciplines and backgrounds by developing programs to support and sustain members, and the aquatic species industries that they serve. 2. Identify, foster and strengthen professional interactions among aquatic medical practitioners and other organizations around the world. 3. Be an advocate for, develop guidance on, and promote the advancement of the science, ethics and professional aspects of aquatic animal medicine within the veterinary profession and a wider audience. 4. Optimally position and advance the discipline of aquatic veterinary medicine, and support the practice of aquatic veterinary medicine in all countries. 	<p>> ADDED: June 18, 2010 You can pay your conference registration fees online now... more...</p> <p>> ADDED: May 7, 2010 Information on the World Aquatic Veterinary Conference 2010 more...</p>
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Draft Middle Section of Home Page

The bottom section repeats contact information but also has three sections which can hold quick links to various information that is of current interest i.e. consultations, conference, news, legislation etc.

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<p>Telephone: +44 071 34567890</p>	<p>Email: support@wavma.com</p>	<p>http://www.wavma.com</p>
<p>DESIGN PROOFS</p>	<p>CONTACT</p>	<p>DESIGN PROOFS CONFERENCE SITE</p>

LEGAL INFORMATION | FEEDBACK | CONTACT

Draft Bottom Section of Home Page

Communications Committee Report - continued

You can see how these three areas come together in the picture of the draft CEPD page below.

So what will be included in the website? Firstly there will be pages available to the public which will advertise WAVMA and its role. A second section will only be available to members that will start with a members log-in page which will take you to all the member services such as an archive of the members-I discussions, Continuing Education Professional Development (CEPD) such as webinars or conference archive, association documents such as the bylaws and an image library. Members will be able to check on their membership status, pay their dues and update their details.

The screenshot shows the draft CEPD page. At the top right are links for Contact, Feedback, Members login, and Site A-Z. The WAVMA logo is on the left. A navigation bar includes HOME, MEMBERS AREA, WAVMA NEWS, PUBLICATIONS, ABOUT WAVMA, LINKS, and CONTINUING EDUCATION. Below the navigation bar, the breadcrumb trail reads 'You are here: Continuing Education > Continuing Education'. On the left is a sidebar with links for CONTINUING EDUCATION, ONLINE WEBINARS, IMAGE LIBRARY, and STUDENT SCHOLARSHIPS. The main content area features a quote: 'At WAVMA we understand the vital importance of CEPD... v>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation.' Below the quote is a section titled 'Continuing education for Aquatic Veterinarians' with two paragraphs of placeholder text. At the bottom, a footer contains contact information: Telephone: +44 071 34567890, Email: support@wavma.com, and http://www.wavma.com. There are also links for DESIGN PROOFS and CONTACT.

The screenshot shows the draft Members Log-in Page. At the top right are links for Contact, Feedback, Members login, and Site A-Z. The WAVMA logo is on the left. A navigation bar includes HOME, MEMBERS AREA, WAVMA NEWS, PUBLICATIONS, ABOUT WAVMA, LINKS, and CONTINUING EDUCATION. Below the navigation bar, the breadcrumb trail reads 'You are here: Wavma members > members area'. On the left is a sidebar with links for EXECUTIVE BOARD & COMMITTEES, YOUR PROFILE, and IMAGE LIBRARY. The main content area features a section titled 'Members Only' with a sub-section 'Members sign in below' containing fields for User ID and Password, and a LOG IN button. At the bottom, a footer contains contact information: Telephone: +44 071 34567890, Email: support@wavma.com, and http://www.wavma.com. There are also links for DESIGN PROOFS and CONTACT.

Draft Members Log-in Page

The whole site has been designed to be consistent for users so it will be easy to find what you want but also it should require a minimum amount of time in updating so as to keep it current. The one thing that cannot be designed in to it is an automatic knowledge of what is important to WAVMA's members and what content they want on it. Even more important is that someone provides the necessary content such as images or PowerPoint for member use which will be copyright protected. So please dig out potential suitable content and send it to the Communications Committee or the Secretary.

Nick Saint-Erne, DVM - Communications Committee chair

David Scarfe, PhD, DVM, MRSSAf

Chris Walster BVMS MYPH MRCVS

Devon Dublin, DVMZ

Krystan Grant, DVM

Scholarship Committee Report

2010 John L. Pitts Scholarship Program Recipient Reports

As was reported in the last newsletter, WAVMA has now partnered with the AVMF Scholarship Program. The first round of WAVMA scholarships were awarded to seven out of 18 applicants that applied. Here is the report from one of the scholarship recipients:

Timothy Jones, DVM Candidate 2012,
Cornell University
Summer Externship – University of Florida
Tropical Aquaculture Laboratory, Ruskin, FL

During the months of June and July, 2010, I spent six weeks pursuing an externship at the University of Florida's Tropical Aquaculture Laboratory (TAL), working under Dr. Roy Yanong, an extension veterinarian with the TAL and associate professor at the University of Florida. I was primarily looking to this experience as an opportunity to see a large number of cases so that I might gain practical skills in the diagnosis and treatment of fish. I was fortunate in obtaining this externship because Florida boasts a large industry in both the culturing and importation of (primarily) freshwater fishes for the aquarium trade.

The experience far exceeded my expectations, as the lab received a relatively constant case load throughout my stay, while I also had the opportunity to visit (and even work at) many farms in the area, and attend a few courses for which Dr. Yanong was giving several lectures.

This meant that I was not only exposed to many cases, allowing me to hone my skills at necropsies, external and internal parasite identification, and bacteriology, but I was also afforded the chance to meet people who were working in all aspects of the field, including other veterinarians, fish culturists and farmers. I also had the opportunity to meet researchers, including Dr. Jeff Hill who studies non-

native species and their impacts upon the ecology of Florida. Some of the visits I made included 5-D Tropical, Oceans, Reefs & Aquariums, the Mote Aquaculture Laboratory, and the Tampa International Airport to aid a USDA veterinarian inspect incoming shipments of fish. These visits allowed me to see many different fresh and salt water life support systems and gain an appreciation for environmental and husbandry problems that may plague holding facilities.

An externship at the TAL would not only benefit a student or veterinarian interested in aquaculture. The experience I gained at the TAL would be applicable to all manner of aquatic animal health settings such as persons involved in aquaculture, private fish practice, public aquaria, or at research institutions. The training I received in accurate history taking, parasite identification, performing systematic necropsies, and other essential skills will be invaluable to me in any field involving aquatic animals. Opportunities such as these only continue to cement my desire to integrate aquatic animals into my career as I move towards graduating in the next two years.

I am deeply grateful to the committee for selecting me as a recipient of this scholarship and would like to extend a special thanks to Dr. Roy Yanong, Debbie Pouder, Dr. Jeff Hill, and Dr. Nicole Stacy, all of the University of Florida. In addition, I would also like to thank Dr. Kathleen Hartman (USDA-APHIS) and Dr. Genevieve Dumonceaux of the Florida Aquarium.

Submitted by:

David Scarfe, PhD, DVM, MRSSAf
WAVMA Scholarship Committee Chair
dscarfe@ameritech.net

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Literature Review

Risk Factors Associated With Cataracts and Lens Luxations in Captive Pinnipeds in the United States and the Bahamas.

Colitz CMH, et al (2010). *JAVMA*, 4: 429-436.

Abstract

OBJECTIVES: To determine risk factors for lens luxation and cataracts in captive pinnipeds in the United States and the Bahamas.

DESIGN: Cross-sectional study on 111 pinnipeds (99 California sea lions [*Zalophus californianus*], 10 harbor seals [*Phoca vitulina*], and 2 walruses [*Odobenus rosmarus*]) from 9 facilities.

PROCEDURES: Eyes of each pinniped were examined by a veterinary ophthalmologist for the presence of cataracts or lens luxations and photographed. Information detailing husbandry practices, history, and facilities was collected with a questionnaire, and descriptive statistical analyses were performed for continuous and categorical variables. Odds ratios and associated 95% confidence intervals were estimated from the final model.

RESULTS: Risk factors for lens luxation, cataracts, or both included age \geq 15 years, history of fighting, history of ocular disease, and insufficient access to shade. **Conclusions and Clinical Relevance**—Diseases of the lens commonly affect captive pinnipeds. Access to UV-protective shade, early identification and medical management of ocular diseases, and prevention of fighting can limit the frequency or severity of lens-related disease in this population. An extended life span may result from captivity, but this also allows development of pathological changes associated with aging, including cataracts.

Minimally invasive surgical techniques in bony fish (osteichthyes).

Stetter MD. (2010). *Vet. Clin. North Am., Exot. Anim. Pract.*, 13(2): 291-299.

Abstract

Rigid laparoscopic surgery can be performed on bony fish. It is expected that laparoscopy will become a standard technique in aquatic veterinary medicine and will provide the zoo and aquarium clinician with a greater variety of diagnostic and therapeutic options. Laparoscopy has been found to be a very effective technique to directly visualize visceral organs and collect tissue samples. Although fish have significantly different anatomy as compared with terrestrial animals, the same laparoscopic principles can be applied successfully to this large and varied group of animals.

Fish Biochemical Markers as a Tool for Pollution Assessment on the Svitava and Svatka Rivers, Czech Republic.

Blahova J, et al (2009). *Neuro. Endocrinol. Lett.*, 2009;30 Suppl 1:211-8.

Abstract

OBJECTIVES: The study was designed to assess the pollution of the Svitava and Svatka rivers in and around the industrial city of Brno (Czech Republic) by persistent organic pollutants using selected biochemical markers in chub.

DESIGN: Levels of selected biochemical markers were measured in liver and plasma samples of chub. The concentrations of persistent organic pollutants (POPs) were determined in bottom sediment, semi-permeable membrane devices (SPMDs) and muscle samples, and consequently used for correlation with biochemical markers.

RESULTS: Significant alterations ($p < 0.05$) in some biochemical markers were observed and associated with combined exposure to pollutants. The highest levels of pollutants were found at sites situated downstream from Brno. The most widespread changes were identified in the function of phase I detoxifying enzymes. Significant positive correlations were observed in cytochrome P450 content and DDT concentration in the semi-permeable membrane device ($p = 0.019$, $r_s = 0.886$), and between ethoxyresorufin-O-deethylase activity and content of DDT ($p = 0.041$, $r_s = 0.352$) and polychlorinated biphenyls ($p = 0.034$, $r_s = 0.365$) in muscle tissues of indicator fish.

CONCLUSION: The results presented in our study indicate the highest contamination of sites situated downstream from Brno, where the intensive industrial and agricultural activities as well as domestic waste and sewage most probably comprise the main impact sources of the enhanced level of pollutants and some biochemical markers in fish.

Link to Abstract:

<http://www.ncbi.nlm.nih.gov/pubmed/20821476>

Colleague's Connection

Historical Marine Research In Japan

By Devon Dublin

For over 100 years, the Japanese have had a ship named the *Oshoro Maru* (おしよろ丸). The word maru (丸) literally means circle, and is used to refer to big ships in Japanese. This ship got its name from the Oshoro (おしよろ) port in the Oshoro bay.

The first *Oshoro Maru*, a 31-meter wooden topsail schooner, was built in 1909 to train students in the Department of Fisheries at the Tohoku Imperial University, a predecessor of the incumbent Hokkaido University. In 1910, this ship was converted to a brigantine, and later in 1913, it was equipped with a 63-horsepower engine.



Oshoro Maru I

In 1927, the original *Oshoro Maru* was replaced by the *Oshoro Maru II*, a 42-meter steel barkentine with a 500-horsepower diesel engine and a complement of 59 persons.



Oshoro Maru II (pre-World War II and in 1952)

In 1962, the *Oshoro Maru II* was replaced by the *Oshoro Maru III*, a 67-m 1,180-ton stern trawler equipped with a 2,000-horsepower engine and a variable-pitch propeller. The ship's complement numbered 106 (60 students, 40 crew, and 6 scientists).



Oshoro Maru III

The ship on which I travelled, *Oshoro Maru IV*, replaced the *Oshoro Maru III* in 1984. It is a 1,383-ton, 73-m stern trawler equipped with a 3,200-horsepower engine and was constructed in 1983. Its complement also numbers 106 (60 students, 13 crew, 27 officers and 6 scientists). It is equipped with new instruments, facilities, and sampling apparatus for oceanographic and fishery surveys.

The vessel operates in the Pacific and Indian Ocean and has visited Dutch Harbor, Honolulu, Juneau, Ketchikan, Kodiak, Newport (Oregon), Nome, Seattle, Seward, Valdez, Vancouver and Victoria Harbors. Many scientists and students join the research cruises each year, and they have collected valuable data and samples on the biology of the marine environment. salmon, whale, and benthic animals.

Japanese and foreign researchers not affiliated with this university also embark every year to conduct sampling and oceanographic surveys. The oceanographic and fishery data collected are assembled and published each year, providing valuable data concerning the ocean. Although the ship is used chiefly to train students in the Department of Marine Production System Science, Department of Fisheries Oceanography and Marine Science, and Department of Marine Biological Science, I was able to join the cruise to collect blood and tissue samples for microbiological analysis for the presence of diseases such as Bacterial Kidney Disease and Furunculosis in Salmon.

In spite of being sea-sick for 2 days, it was quite an experience for me and I got to appreciate the difficulties that fishermen deal with as a part of their livelihood. Even though it was not necessary, I took part in all the activities, including handling of the gill net. Now back on the shores of the Land of the Rising Sun, I settle down to processing and analyzing the many samples I now have in my possession. "Ship Ahoy!"



Devon Dublin, DVMZ

Marine Microbiology and Biotechnology Laboratory, Hokkaido University, Japan

Clinical Reports

Tom and Mişa, Two Male Bottlenose Dolphins (*Tursiops truncatus*).

Dr. Erdem Danyer

Keeping dolphins for public display or interaction in a Dolphinarium is developing very fast in many parts of the world. On the other hand, some countries have started to close them forever because of the reactions of people concerning keeping dolphins in captivity. In Turkey, there are eleven dolphinariums. They have swim activities with dolphins, shows, as well as rehabilitation programs for handicapped children. As an aquatic veterinarian, I had an email which says "...in Hisarönü, Turkey there are two dolphins that are kept in captivity in a tiny pool. Can you check on them?" I spoke about this e-mail to İşıl Aytemiz, who is a veterinary medicine student, and we went to Hisarönü immediately, where our dramatic adventure started.

When we first arrived at the dolphinarium, we looked around the environment and saw that there are many hotels, bars, and discos in the area. When we got near the pool, we heard continuous and abrasive sounds. After investigation, we found that the sound was coming from a water pump, which is underground beneath the pool. We looked around the pool. Not everywhere was concrete surface and there are soil areas surrounding the pool. There is an office and the cabins for clients near the pool. The food preparation workbench and fish deep freezer are in open air. In addition, personnel use this workbench for their personal needs. Also, the medicine cabinet is outside. The dustbin, medicine cabinet, fish deep freezer and fish preparation workbench are in the same part of the pool where the ground surface is soil.



The pool's dimensions are 12 X 19 X 4 meters. It was very narrow for dolphinarium standards. The pool walls were painted, not tiled by ceramic. Near the pool, I saw dingy parts on the floor. I saw dead bees and leaves on the water. On the floor of the pool, I saw that it has been covered fully with feces and dead food fish, algae covered the walls of the pool. There was a shade tent on the top of the pool, which was blue color. I realized that this is a trick to make the pool look clean with the blue light.

In the fish deep freeze there were mackerel (*Scomber scomber*), anchovy (*Engraulis encrasicolus*), and horse mackerel (*Trachurus trachurus*). There wasn't any checklist for food that indicates how many kilograms the dolphins eat each day, or what food they eat. The fishes were not packaged in the deep freeze, they were all open. I watched during a feeding time. They put just a few fish into a bucket of water, but then they did not give all of the defrosted fish to the dolphins. The trainer put the remaining fishes again into the deep freeze. While we were in the facility, in three hours I saw that they gave only these fish to the dolphins.



On the first day, they didn't let us handle the animals to take blood samples or examine them. We could take pool water, feces and a blowhole sample. One of the dolphins, named Mişa, was listing on his left side nearly 40° but we could not examine him. Parasitological examination of the feces found *Anisakis spp.* and Acanthocephalan eggs. *Anisakis* and Acanthocephalans are gastrointestinal parasites that can be a cause of gastric ulcers. Plus, *Anisakis spp.* is a zoonotic parasite that is transmissible to humans. In the literature and standards for dolphin pools, the coliform bacteria rate must be <1000 MPN. We found that the total coliform for this pool was >11000 MPN/100 mL (SM 9221:B). It is eleven times higher than the standards!

Clinical Reports

On 07.08.2010, we went back to the facility with John A. Knight *BVetMed, MIBiol, MRCVS*, who is from the Born Free Foundation. After persuasion of the dolphinarium owner by a manager from the Ministry of Health, we were allowed to take a blood sample from the dolphin named Tom. We could also test the water quality in real time. The water pH was 5.7. Acceptable range for pH is 6.5-8.5. In this microbiological examination, we did not find any bacteria, but the water pH was too low for dolphins and people who are swimming in it. In the blood test, we saw Tom has polycythemia, which indicates there is a stress factor on him. The hematocrit level was high, which shows there is dehydration. Also the leukocyte count was high, which shows us there is an infection.



After getting the test results, quickly we wrote petitions to the Environmental Ministry and Health Ministry. Now we are waiting for their answers. Also, we are studying about proposing a legislation that will contain standards for dolphinariums. Of course, our wish is to watch wild animals remain in their wild state, but we cannot do everything instantly. My slogan is *"Born free, die wild."*

By Dr. Erdem Danyer

erdemdanyer@gmail.com

Istanbul, Turkey

Quiz: Ophthalmology—

A Rockfish With a Bulging Eye

Enry Garcia, DVM

Source: VETERINARY MEDICINE/dvm360

You are asked to evaluate a rockfish at a local aquarium that has a bulging left eye. The animal seems to navigate well around obstacles in the fish tank.



What is the primary cause of the buphthalmia?

- [a\) Trauma](#)
- [b\) Intraocular neoplasia](#)
- [c\) Presence of air inside the eye](#)
- [d\) Corneal edema](#)

Click here to take the Quiz: <http://veterinarymedicine.dvm360.com/vetmed/ArticleStandard/Article/detail/669437>

Aquatic Vet News

Quarterly Newsletter

Instructions for Authors and Contributors

Do you want to make an impact and a contribution to aquatic veterinary medicine? If so, consider becoming a regular or periodic contributor to the quarterly *Aquatic Vet News*.

Really excel by volunteering to be an Associate Editor to collate information and edit select *Aquatic Vet News* columns.

Help make the *Aquatic Vet News* the source for pertinent and important news. If you would like to be an Associate Editor or have material published in AVN, contact or submit it today to Nick Saint-Erne (Saint-Erne@Q.com).

Submission Deadlines:

Issue 1 – February 15 (published early March)

Issue 2 – May 15 (published early June)

Issue 3 – August 15 (published early September)

Issue 4 – November 15 (published early December)

While any information directly relevant to aquatic veterinary medicine might be published, we particularly invite contributions for (and Associate Editors to assist with) the following regular columns:

(Submissions may be edited to fit the space available. One page is ~1,000 words).

Aquatic Vet Q&A

Short description of a problem and solution to an issue – if you don't have the solution, ask the questions and let readers submit solutions for the next issue (½ to 1 page).

Clinical Cases

Clear description of a distinct clinical case or situation and how those were resolved (1-3 pages)

Book Reviews

Brief review of a published book, including an overview and critique of the contents and where to obtain the book (½ to 1 page).

News & Views

Brief synopsis or information about news published elsewhere (½ to 1 page).

Publication Abstracts

Abstracts of published veterinary and scientific journals with full citation/reference (authors, date, title, and journal volume and page numbers – ½-1 page).

Legislative & Regulatory Issues

Synopsis or description of emerging legislation or regulations with information on how to access further detailed information (½ to 1 page).

Externships, Internships & Residencies

Description with specific contact information for veterinary student externships and post-graduate internships or residencies at private practices, institutions, universities or organizations (½ to 1 page).

Meetings & CEPD Opportunities

Description or synopsis of upcoming aquatic veterinary or (veterinarian-relevant) non-veterinary in-person or on-line educational meetings noting the meeting title, dates, location, and contact person or website (½ to 1 page).

Jobs Available

Description of available full or part-time employment for aquatic veterinarians (½ to 1 page).

Pictures

Pictures & Photographs

Contributors of original photographs illustrating aquatic veterinary practices or procedures will be credited.

Emerging Issues

What's Killing Farmed Salmon?

New Virus May Also Pose Risk to Wild Salmon

ScienceDaily -

Farmed fish are an increasingly important food source, with a global harvest now at 110 million tons and growing at more than 8 percent a year. But epidemics of infectious disease threaten this vital industry, including one of its most popular products: farmed Atlantic salmon. Perhaps even more worrisome: these infections can spread to wild fish coming in close proximity to marine pens and fish escaping from them.

Heart and skeletal muscle inflammation (HSMI), an often fatal disease, was first detected in salmon on a farm in Norway in 1999, and has now been reported in 417 fish farms in Norway as well as in the United Kingdom. The disease destroys heart and muscle tissue and kills up to 20 percent of infected fish. Although studies have indicated an infectious basis, recent efforts to identify the pathogen causing the disease have been unsuccessful.

Now, using cutting-edge molecular techniques, an international team led by W. Ian Lipkin, MD, the John Snow Professor of Epidemiology and director of the Center for Infection and Immunity at Columbia University's Mailman School of Public Health, has found evidence that the disease may be caused by a previously unknown virus. The newly identified virus is related but distinct from previously known reoviruses, which are double-stranded RNA viruses that infect a wide range of vertebrates.

"Our data provide compelling evidence that HSMI is associated with infection with a new reovirus," says Gustavo Palacios, first author of the study and assistant professor of Epidemiology in the Center. "While there is no evidence that this could spread to humans, it is a threat to aquaculture and it has the potential to spread to wild salmon," added Dr. Lipkin.

See the source (<http://tinyurl.com/332vff>) for the full story.



Salmon. (Credit: iStockphoto/Matthew Hayes)

Pathogenic bacteria discovered in clams

SPAIN-

A team of researchers at the University of Santiago de Compostela (USC) discovered new bacteria with pathogenic potential in Galician clams. Over two years, the experts - coordinated by Jesus Lopez Romalde - discovered an incidence of 50 percent of a bacterium of the Rickettsia strain, that brings about mortality in other molluscs and that only affects the clam.

The USC scientists analysed the DNA of these bacteria and tried to isolate them in the laboratory, since it is not currently possible to work with clam cell cultures in vitro. The scientists hope to move forward in the characterisation of these bacteria and to learn more about their importance from the pathological point of view, EFE reports.

The next goal is to design strategies to prevent the infection from spreading amongst the populations of Galician clam.

"We have already been working with the populations of Galician clam for six years, ..."

See the source (<http://tinyurl.com/2dhpvyv>) for full information.

By Analia Murias
editorial@fis.com
www.fis.com



A Galician clam

Legislative & Regulatory Issues

Sernapesca Increases Measures to Protect Salmon

CHILE -

The Chilean fisheries body, Sernapesca has tightened up the rules for importing salmon eggs in measures to protect salmon. Now, the import of eggs may be made only from countries that have surveillance systems for Pancreas Disease (PD), recognised by the National Marine Fisheries Service.

Sernapesca National Director, Félix Inostroza, said it was necessary to increase the prevention and protection measures in Chile to reduce the risk of transmission of the disease. He said the measures were necessary to protect the salmon industry for the greatest risks and the greatest possible impact.

"Imports from countries that do not submit records to support us as a country, zone or centre free of PD, or whose background is insufficient, will not be allowed," Mr Inostroza said.

The decision by Sernapesca to formalize the Resolution No. 873 supercedes a previous one, which provided the option of certification for PD analysis based only on individual screening for eggs exported to Chile.

"This means that we will evaluate all implemented surveillance systems ..."

See the source (<http://tinyurl.com/2cmvo9o>) for full information.

TheFishSite News Desk

Australian Importation Regulations

Submitted by **Dr. Richmond Loh**

The Agriculture-Fisheries and Forestry Australia (AFFA) will implement changes on the importation requirements for livebearers, gouramis and cichlids based on an import risk analysis (IRA). The IRA report proposes that additional quarantine measures are required to manage the quarantine risks in accordance with Australia's conservative approach to quarantine. The IRA recommends that the importation of these fishes for ornamental purposes be permitted only if fish are batch tested post-arrival in Australia to show they are free of megalocytiviruses; or the fish are sourced from a country, zone or compartment that is recognised by Australia to be free of megalocytiviruses (based on active surveillance). The proposed sampling/testing regime uses destructive methods and is required to provide a 95% confidence level of detecting the pathogenic agent if it were present at a prevalence of 5%.

With most diseases, the stresses of transport, water quality aberrations and assimilation to a new environment before and after arrival in Australia would be sufficient to precipitate overt disease and mortality. With this in mind, the current conditions include that gouramis and cichlids are held in quarantine facilities approved by an AQIS-recognised competent authority for at least 14 days before export, health certification attesting that they are sourced from populations with no known significant clinical signs of disease in the previous six months, and that the fish are held in post-arrival quarantine for at least 14 days. For other fishes, they are held in post-arrival quarantine for periods of:

21 days for goldfish;

7 days for other freshwater ornamental finfish;

7 days for all other marine finfish.

During the post-arrival quarantine period, state laboratory testing and/or voluntary destruction of affected tank/s is a requirement in cases where there is consistent or increasing mortalities over time and if cumulative mortalities exceed 25% of fish in a single tank. To date, there has not been a major objection to the destruction of fish by ornamental wholesalers.

Stakeholders were given the opportunity to provide comment. Other government agencies, anglers and food fish aquaculturists support the proposal, however, the Pet Industry Association of Australia, the Ornamental Fish Association of Australia, the Singapore Aquarium Fish Exporters Association and the Agri-Food & Veterinary Authority of Singapore oppose and question

Legislative & Regulatory Issues

the scientific rigor of the IRA and implored Biosecurity Australia to consider the impact on the livelihoods of people in the ornamental fish industry.

The Australian ornamental fish industry is worth in excess of AUD\$450 million with 19 million live fish imports per annum. Based on recent data, more than 50% of ornamental fish are imported and of these, approximately 60% of fish imports will be affected. The destructive testing technique will drive ornamental fish prices up and reduce the variety of fishes available. The opponents to the IRA claim the impositions will cripple the industry.

The data presented in the IRA makes a fundamental assumption that the virus is not present in Australia and as such, needs to be prevented from entry. However, data quoted in the report is conflicting as it makes clear that the virus is already present in Australia. If the virus is endemic or regionally endemic in Australia, the proposed changes to requirements may be seen as a non-tariff barrier to trade and could constitute a breach of Australia's obligations as part of the World Trade Organisation.

It appears that the provisional final report has been released without addressing the concerns of the opponents of the IRA raised during the consultation period. When the final report is released the changes to quarantine procedures will take effect as soon as early 2011.

The interest in the IRA for ornamental fish imports arose as a response to a study conducted at the University of Sydney. Here researchers demonstrated the potential for gouramis to harbour iridovirus without exhibiting clinical signs of disease for at least 28 days and that the Murray cod (*Maccullochella peelii peelii*) could be infected with the virus. The conclusions of the experiments were challenged by several bodies when it was used to support the proposals set by the IRA. In the experiments, not all fish that died had histological signs of iridovirus, nor did all deaths test positive by PCR. The absence of evidence was simply explained away as "the lack of positive PCR results in all fish may have been due to... the incomplete range of tissues examined in each test, so that lesions and tissues that contained virus were not examined."

Opponents of the IRA believe there could be another explanation for the deaths. Water quality monitoring was not mentioned in the experimental design. Additionally, the experiments were conducted in 27°C which is comfortable for the dwarf gourami (*Colisa lalia*), but not for the temperate Murray cod.

The IRA recognises that there are no commercially available, validated, diagnostic screening tests for testing sub-clinical carriage in post-entry batches or for demonstration of country, zone or compartment freedom. The lack of

a validated test means it will be difficult to audit and verify any stock accreditation scheme. The only test available are those that had been developed by the institution that conducted the aforementioned research. Even if this diagnostic test becomes available, it would be impractical since results may take in excess of 7 days and likely to be costly.

Urgent feedback on the proposed changes to the Australian quarantine procedures for ornamental fish is sought after. Responses can be forwarded to:

Dr Richmond Loh (thefishvet@gmail.com).

References made in the text:

Livebearers includes all members of the family Poeciliidae, gouramis include all members of the subfamilies Luciocephalinae and Macropodinae of the family Osphronemidae and cichlids include all members of the family Cichlidae.

Submissions received in response to the Draft Import Risk Analysis Report for Ornamental Finfish with Respect to Iridoviruses can be found at: http://www.daff.gov.au/ba/ira/current-animal/ornamental_fish/ornamental_fish_submissions

Biosecurity Australia's Provisional Final IRA for freshwater ornamental finfish can be found at: http://www.daff.gov.au/data/assets/pdf_file/0007/1709755/2010_22_BAA_Prov_final_Irido_IRA_100722.pdf or

http://www.daff.gov.au/ba/ira/current-animal/ornamental_fish/2010-22_baa

The scientific papers published by the University of Sydney researchers in relation to iridoviruses include:

Go J. & Whittington R. (2006) Experimental transmission and virulence of a megalocytivirus (Family Iridoviridae) of dwarf gourami (*Colisa lalia*) from Asia in Murray cod (*Maccullochella peelii peelii*) in Australia. *Aquaculture* 258: 140–149.

Go J, Lancaster M, Deece K, Hungvel O & Whittington R (2006) The molecular epidemiology of iridovirus in Murray cod (*Maccullochella peelii peelii*) and dwarf gourami (*Colisa lalia*) from distant biogeographical regions suggests a link between trade in ornamental fish and emerging iridoviral diseases. *Molecular and Cellular Probes* 20: 212–222.

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Aquatic Education

5th Aquatic Animal Models in Human Disease Conference September 20-22, 2010

Oregon State University, Corvallis, Oregon, USA

If you are currently using aquatic models and are interested in learning about recent advances in their use for human health related research or if you are interested in learning how these models may be used for translational research, this conference is for you. The conference brings together researchers, industrial leaders, and funding agency representatives to discuss how the unique advantages of aquatic models are being exploited to accelerate our understanding of the cause of human diseases and for the discovery of novel treatments.

This conference will provide investigators with a unique opportunity to exchange scientific information, identify research tools and opportunities, and encourage enhancement of the utility of aquatic models for studies of human disease, including:

- The science—a range of presentations on recent discoveries from a variety of fields that are not typically covered in more specialized scientific conferences.
- The technology—introduction and discussion of technologies being developed using aquatic models.
- The resources—current resources available and identify resource needs of the research community essential to support advancement of a variety of animal models.
- The results—information within a broad range of disciplines involving various animal models, required methods and proven approaches

For more information: www.oregonstate.edu/conferences/event/aamhd2010/index.html.

Fish Health Management Veterinary CE Course

October 7 - 9, 2010

North Carolina State University College of Veterinary Medicine Office of Continuing Education & Outreach

The purpose of this course is to familiarize the participant with the fundamental principles of ornamental fish and aquatic invertebrates' management and medicine. This course is open to veterinarians and non-veterinarians alike. Attendees will learn about the following topics: water quality, recirculating aquatic systems, diagnostic techniques, environmental diseases, infectious diseases, neoplasia, therapeutics, anesthesia and analgesia.

Continuing Education

This course offers twenty-four (24) hours of CVME for veterinarians and veterinary technicians.

Registration

Registration for this course is \$549 (\$299 for graduate students), which includes lectures, lunches, and a dinner at the North Carolina Aquarium at Pine Knoll Shores.

Cancellation Policy

Full refunds will be granted for notices received in writing, either by mail, fax, or e-mail, by the end of early registration. A refund less a 25% administrative fee will be granted for requests received during late registration. No refunds will be granted after the course has begun.

Location & Lodging

The Fish Health Management course will be at the Sheraton Atlantic Beach, 2717 West Fort Macon Road, Atlantic Beach, NC. To receive the conference discount of \$109-\$189 + tax per night phone 1-800-624-8875 and reference the "Fish Course"). Reservations must be made by September 6, 2010, to receive the discounted rate.

If you are flying to the course, the biggest airport nearby is Raleigh Durham International (RDU), which is about a three-hour drive from Atlantic Beach. There are smaller airports in New Bern and Wilmington, which are closer. If we have enough people flying in to Raleigh, we may be able to offer a van to the coast.

For the full program schedule and other information & online registration go to <http://cvm.ncsu.edu/conted/fish.htm> or call the OCEO Office (919-513-6366).

Aquatic Education



Joint
Symposium



Advances in Clinical Aquatic Veterinary Medicine

Call for Speakers

As Associate Sponsors of Aquaculture America 2011, the AVMA and WAVMA invite aquatic veterinarians and veterinary paraprofessionals to submit abstracts for 15 or 30 minute presentations on issues that deal directly with, or involve aquatic veterinary medicine.

Aquaculture America 2011
February 28 - March 3
New Orleans, Louisiana

Presentations that address the following are particularly encouraged:

- Pathophysiology of emerging and important diseases in aquaculture
- Clinical cases of food and ornamental finfish, crustacean and molluscs
- Biosecurity and approaches for the prevention, control and eradication of disease
- Optimal and judicious use of biologics therapeutic agents in disease outbreaks
- Legislative and regulatory issues facing aquatic veterinary medicine
- Public health and zoonotic disease
- Seafood safety.

Presentations pertinent to practicing veterinarians and aquaculture producers are particularly important. Should this program meet veterinary CE standards, veterinarians attending will receive a veterinary CE certificate of participation.

****** Intent to Present – deadline August 10, 2010**

To ensure inclusion in this Session, speakers intending to present should send the author name/s and presentation title, and the desire for a 15 or 30 minute presentation to:

Dr. A. David Scarfe, Session Coordinator
American Veterinary Medical Association

dscarfe@avma.org

(847) 285-6634

****** Abstract Submission – deadline August 30, 2010**

All abstracts must be submitted online through www.WAS.org.

AQUACULTURE AMERICA 2011, AVMA and WAVMA are unable to subsidize registration fees, travel or hotel costs. All presenters are required to pay their own registration, accommodation and travel expenses. AVMA & WAVMA members receive discount registration rates.

Aquatic Education

2nd International Congress & Exhibition on Aquatic Animal Health Management and Diseases

October 26-27, 2010

Tehran, Iran

The 2nd International Congress & Exhibition on Aquatic Animal Health Management and Diseases" will be held by Veterinary Council, I.R. Iran, as Organizer, with collaboration of Contemporary Conference Organizers as co-organizer and with support of Iran Veterinary Organization, Faculty of Veterinary Medicine of University of Tehran, Iranian Fisheries Research Organization and Iran Fisheries Organization.

The Topics of congress include:

- * Diseases, Prevention and Treatment
- * Nutritional Health Management
- * Water Quality Management
- * Health Management in Farms

In the first Congress, held on January 27-29, 2009, more than 600 papers from Belgium, France, India, UK, Germany, Malaysia, Philippines, Greece, Poland and Iran were submitted. Also 32 Iranian and foreign companies participated in the specialized Exhibition, held besides this Congress.

You are kindly invited to submit the abstracts and we highly appreciate if you could kindly forward this announcement to other colleagues who may be interested in submitting an abstract.

- * Deadline for abstract submission is June 20, 2010.

Congress Participation fee will be 150€/each person.

The fee includes:

- Congress publications and CDs
- Lunch and refreshment (Two days)
- Certificate of Attendance
- Airport pick up and Transfer (Transfer from Airport to Hotel and vice versa)
- Tehran Sightseeing

To receive more detailed information, please visit our website or contact the secretariat:

Dr. Siamak Goharkhay

Congress & Exhibition Executive Secretary

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Organizer



سازمان نظام دامپزشکی جمهوری اسلامی ایران
Veterinary Council I.R. IRAN

Aquatic Education

Exotic Animal Medicine for the Clinical Practitioner

October 23-24, 2010

South Padre Island, TX

Presented by the American Association of Zoo Veterinarians

The American Association of Zoo Veterinarians is presenting an in-depth, 2-day course on exotic, zoo, and wild animal medicine Saturday, October 23, 2010 to Sunday, October 24, 2010 at the Isla Grand Beach Resort, South Padre Island, TX. Lectures will be geared to the private exotic animal clinical practitioner and are expected to include topics such as exotic hoofstock, primate and carnivore medicine as well as cutting edge topics in avian, herpetologic and geriatric medicine. Registration includes lecture materials, break refreshments, Sunday evening reception (AAZV conference ice breaker), and certificate of attendance for display in your practice. Class offers 14 hours of CE credits sponsored by the American College of Zoological Medicine.

Registration fee: \$350 by 19 September, \$400 after 19 September 2010.

Rooms available at the Isla Grand Beach Resort, 500 Padre Boulevard, South Padre Island, TX 78597-6615, phone (956) 761-6511. Mention AAZV for group discount.

Register at www.aazv.org starting 1 May, 2010, or contact AAZV for a registration form:

AAZV
581705 White Oak Road
Yulee, FL 32097
Telephone (904)225-3275
Fax (904)225-3289

Learn exotic animal medicine from the experts!

Continuing education credits endorsed by the American College of Zoological Medicine



Aquatic Education

26th Caribbean Veterinary Medical Association Conference

“Promoting Animal Health and Welfare for Sustainable Human Development”

November 3-6, 2010.

Ocho Rios, Jamaica.

The CbVMA conference is designed for veterinarians, senior veterinary students and allied professionals who are interested in improving the health and welfare of all animals: companion animals, farm animals, horses, marine mammals and more. These animals represent one side of an ever more complex and difficult association between animals and man. This tenuous relationship exists in the Developing World in an even more stark juxtaposition than in the First World. The challenge of this conference is to demonstrate how improving the well-being of animals benefits people whether they live in the First World or the Third World.

The biennial CbVMA conferences are the premier meeting venues for Caribbean veterinarians. They bring together colleagues from almost all the Islands and from parts of Central and South America. There was also a time when, through the Commonwealth, hundreds of Canadian veterinarians participated in these conferences. In 2010 we are not only inviting back to the Caribbean our Canadian colleagues, but we are actively encouraging veterinarians from all over the world to attend. This is only natural now, as with four inter-national veterinary schools situated in the English-speaking Caribbean there are thousands of veterinarians practicing throughout the world who have received their training in this region.

The CbVMA 2010 Scientific Program will feature regionally and inter-nationally renowned speakers. For four days leading experts in the veterinary profession will deliver information on important veterinary topics that span the range of species and the diversity of interests in veterinary medicine.

And it goes without saying that if you are in the Caribbean you're going to have fun. The Conference will be at Jamaica's largest conference hotel, the Sunset Jamaica Grande Resort and Spa. It's an all-inclusive family hotel so you can bring your family, and after you check in and register, you can do just about anything you want without the payment of an additional fee.

We will not be as big as some of the veterinary conferences that are to be found in North America and elsewhere. However, you will not experience a nicer place to learn and a closer feeling of family, than you

will when you join us in Ocho Rios, Jamaica, between November 3 and November 6, 2010.

Symposia/Wet labs:

The Scientific Committee is open to receive proposals and/or sponsor-ship for symposia and wet labs that relate to the general conference theme. Sessions will last 50 minutes and will consist of a maximum of three presentations with a short time for discussion at the end of the session.

Major speakers will have the entire 50 minutes to make their presentations. It is desirable that participants of symposia should be self-financed although funding will be available for key-note speakers. The Wet Labs will cover a variety of topics of interest to veterinarians of all ages and levels of experience. Small groups of veterinarians will be accommodated in each Wet Lab so that each individual will be involved in the activity.

DEADLINE FOR SUBMISSION OF ABSTRACTS:

MAY 31, 2010

Participants are invited to submit abstracts of proposed oral or poster presentations to the CbVMA Conference Scientific Committee. Oral presentations should not be more than 40 minutes long. Abstracts should contain title of the presentation and a one paragraph summary of the presentation. Authors will be notified regarding Abstract acceptance. Accepted abstracts will be printed in the Conference proceedings that will be distributed at the Congress. Please indicate if you are submitting your abstract for oral or poster presentation.

For recommending Symposia, Wet labs and submission of Abstracts: Chairman,

Scientific Committee CbVMA Conference Secretariat
P.O. Box 1111, Kingston 8, Jamaica

Email: scientificchair@cbvma.org

For more information on the **26th Caribbean Veterinary Medical Association Conference** go to <http://cbvma.org>.



Aquatic Veterinary Opportunities

Chicago Zoological and Aquatic Animal Residency Program

Chicago, Illinois, USA

The University of Illinois, College of Veterinary Medicine in conjunction with Brookfield Zoo, Lincoln Park Zoo and John G. Shedd Aquarium are offering a three year residency in Zoological and Aquatic Animal Medicine. The residency is approved by the American College of Zoological Medicine (ACZM) and is supervised by at least two Diplomates of this college. The residency is supported by a minimum of six full-time zoo, aquatic and wildlife veterinarians between all the facilities. The residency is designed to integrate experiences from all four institutions to provide clinical training that will enable the resident to become competent in exotic, zoo, aquatic and wildlife medicine and provide the necessary requirements to be eligible for certification in the American College of Zoological Medicine.

The residents primarily rotate among Brookfield Zoo, Lincoln Park Zoo and the Shedd Aquarium, which are all located in and around Chicago. Each rotation will be between four to eight months and residents will spend approximately 10-14 months at each of these facilities. These world class conservation institutions offer extensive exposure to zoological and aquatic species including: megavertebrates, large carnivores, non-human primates, cetaceans, herptiles, birds and fish.

Residents gain clinical experience under the direction of veterinary and management staff including handling and immobilization, providing preventative medicine, management of sick and injured animals as well as population health. Residents participate in rotations with the Zoological Medicine and Surgery Service at the College of Veterinary Medicine and are encouraged to spend some time rotating through Imaging, Anesthesiology and Surgery. Residents complete graduate level courses (statistics) through the University of Illinois. Residents have the opportunity to interact and work with the University of Illinois Zoological Pathology Program which provides service to all three zoological institutions based in Chicago. Opportunities to work towards a graduate degree may be available.

Primarily emphasizing clinical medicine, the residency will provide scientific opportunity and has requirements for scholarly activities including publication preparation and teaching. Residents participate in weekly multi-institutional courses including literature and topic review, case rounds and teach veterinary students on clinical rotations at each facility.

Residents will also participate in teaching some didactic course work and laboratories for veterinary students. Residents will be responsible for writing and submitting manuscripts for publication to fulfill ACZM credentials and present selected projects at professional meetings. At least one manuscript must be an original research project which will be selected with input from veterinary mentors.

Funding is provided to permit the resident to attend continuing education annually and one-time attendance of the ACZM preparatory course. The position starts in mid July of each year with annual re-appointment for a maximum of three years based on annual performance. Residents will be employed by UIUC-CVM and compensated on a scale of standard residency programs which includes benefits through UIUC-CVM with vacation and sick leave accruing monthly.

Applicants must hold a DVM degree from an AVMA accredited program and have minimally completed a one-year internship or equivalent practice experience. Licensure to practice or eligibility for licensure in Illinois is needed to apply with full licensure required before beginning the residency. The University of Illinois, Brookfield Zoo, Lincoln Park Zoo and the John G. Shedd Aquarium are interested in candidates with the highest standards of scholarship and ethics and who are committed to conservation and animal welfare. Interested candidates are encouraged to contact and/or visit participating institutions the summer prior to applying or well before the application deadline.

Please contact Dr. Jennifer Langan, DVM, Dipl. ACZM (via Barbara Matuch at Barbara.Matuch@czs.org), Dr. Kathryn Gamble, DVM, MS, Dipl. ACZM (kgamble@lpzoo.org) or Dr. Caryn Poll, DVM (cpoll@sheddaquarium.org) for more information.

Applications should include a letter of intent, curriculum vitae, original transcripts, and three letters of reference. Candidates are responsible for ensuring all application materials, including reference letters and transcripts are received by the posted deadline.

Applications and reference letters should be emailed to: Mary Patrick (mpatrick@illinois.edu), Attn: CZAAR. Transcripts should be mailed to Mary Patrick, Attn: CZAAR, University of Illinois, College of Veterinary Medicine, Department of Veterinary Clinical Medicine, 246 SAC, 1008 West Hazelwood Drive, Urbana, IL 61802.

Deadline for application is the **October 15, 2010**.

Aquatic Veterinary Opportunities

PhD opportunity: Disease control in farmed Murray cod University of Melbourne, Australia

An exciting opportunity exists for a PhD studentship in a pioneering area of integrated aquaculture in Murray cod. Horticultural properties in the northwest of Victoria have begun utilising their large water holdings for Murray cod aquaculture. However, the farmers are geographically isolated, have little technical support and minimal research has been completed on this species in these settings.

This PhD project is suitable for those with an interest in veterinary epidemiology and pathology. The successful candidate will develop a high level of knowledge in the diseases that occur in farmed Murray cod. They will use this understanding to assist farmers to develop a series of management practices they can use to better predict when diseases are likely to occur and how to avoid them.

This project is funded by the Fisheries Research and Development Corporation in collaboration with the Victorian Department of Primary Industries (DPI) and the University of Melbourne.

Project summary

Murray cod aquaculture is a new and developing industry in inland Australia. Much of the existing industry is currently integrated into existing horticulture enterprises, and there is enormous potential for farming of Murray cod in agricultural dams. Good fish health and biosecurity practices are critical to profitable production in these systems. However there are currently a range of health issues affecting productivity in Murray cod aquaculture. Many of these centre around the farmers' lack of control over water quality and supply in integrated systems, along with limited access to pathology services and veterinary professionals.

Through on-farm monitoring and sampling, the PhD student will investigate the prevalence of disease on farms, and their association with a range of environmental variables. The student will have the opportunity to develop skills in aquatic gross pathology and histopathology, epidemiology and farm management. The student will work closely with farmers to assist them in developing their own basic disease identification skills and gain a holistic understanding of how disease events can interact with water quality and management issues.

The student will work in close collaboration with DPI and University of Melbourne researchers, along with other fish health specialists.

Disease surveillance data will be collected and used to develop formal fish health Better Management Practices which will equip farmers with an understanding of likely major disease outbreaks, causes, and how to mitigate negative affects on productivity. The findings from this project will help inform other Murray cod aquaculture enterprises in other parts of Australia.

Academic criteria

A four-year honours degree in a biological science or veterinary science from an Australian university, or a qualification or combination of qualifications considered by the Research Higher Degrees Committee to be equivalent. Applicants should have achieved an overall H1 (80-100%) or H2A (75-79%) grade in the relevant honours or masters degree, however applicants who have completed a Bachelor of Veterinary Science will be assessed individually.

Applicants are normally required to have completed a research project / component that accounts for at least 25% of their year's work at 4th year or at masters level. Graduates of a Bachelor of Veterinary Science from an Australian institution are normally deemed to have met this requirement.

What does the scholarship provide?

Applicants will apply for an Australian Postgraduate Award, which will provide a tax-free living allowance of \$22,500 per annum (2010 rate) if granted. Project funds will cover the costs of fieldwork and project expenses.

For more information please contact:

Dr Tracey Bradley

Principal Veterinary Officer - Aquatic Animal Health
Department of Primary Industries:

Tel: +61 3 9217 4171

Email: Tracey.Bradley@dpi.vic.gov.au

How to apply

Applicants should submit their application via the online form at Research Future Students:

www.futurestudents.unimelb.edu.au/grad/research/application/apply.html

WAVMA Annual General Meeting in Greece





New WVA Veterinary Schools and Faculties Database



The WVA veterinary schools and faculties database is now available at: www.worldvet.org/node/5248. This comprehensive global database is designed to be the definitive resource to identify and link to every veterinary training facility in the World. This database has been developed as part of the World Veterinary Association's commitment and contribution towards the standards of veterinary education and competencies of veterinary graduates around the World. It expands on the Universities, Institutions, Colleges and Schools Awarding Veterinary Degrees (www.worldvet.org/docs/GlobalVetSchools.pdf) database developed by Dr. David Scarfe. The WVA is grateful to Dr. Scarfe for his contribution and maintenance of this database.

It will be useful for individuals wanting to locate veterinary educational institutions and regulatory agencies wanting to check the training establishment of foreign graduates seeking registration to practice. The listing of a veterinary school or faculty does not imply that it meets any global standard established by the WVA or other international organization. The WVA encourages countries and their veterinary school and faculty deans to provide corrections or more up to date information to replace the current content on any of the pages in the database.

To visit the database go to www.worldvet.org and click on the Education link in the main menu on the left side of the screen.

Contact Corner

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Koi Pond photograph by Nick Saint-Erne

Past Presidents

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World Aquatic Veterinary Medical Association

One Profession; One Discipline; One Voice – Cohesive & Inclusive!

2010 MEMBERSHIP FORM

New Application or Renewal (check one)

ALL New Members or Current Member changing contact information must complete and submit this form.
 (Current members, with no change of address, can renew membership and pay annual dues on-line at www.WAVMA.org)

Please complete all mandatory fields marked with*, as accurately as possible.

Contact Information

*Name (First, Middle, Last) _____ Date _____
 Business/Organization Name (if applicable) _____ Position/Title _____
 *Mailing Address _____
 *City _____, *State/ Province/ Canton/ County (UK) _____
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 (Secondary e-Mail addresses will be used if the primary address becomes non-functional)

Check One Membership Category

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Student Member (must be currently enrolled in a recognized veterinary school or be a graduate veterinarian enrolled in a post-graduate educational program, internship or residency; Student Members receive complimentary (free) Full Membership for the year following graduation from veterinary school) – US\$50
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Veterinary Technician/Nurse Member (must be working under the supervision of a veterinarian) – US\$50
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Affiliate Member (non-veterinarian graduate of a nationally recognised university or institution of higher education who supports the Mission and Objectives of the Association) – US\$100
 *Degree _____; *Year _____; *University _____; *City _____; *Country _____

Allied Veterinary Organization Member (legally formed organization or society whose members are predominantly veterinarians) – US\$500
 *Total number of current members _____; *Number (or %) of members that are veterinarians _____;
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Would you like any information to be excluded from your membership listing in an Annual Membership Directory? If so, please specify what information you want excluded _____

Membership Annual Dues Payment Options

(New members joining in November/December will be considered paid through December 31 of the following year)

Check One Payment Option: Cheque enclosed; Please charge the credit card below; I will use the secure credit card system on the WAVMA Membership webpage.

Please Mail or Fax this form to:

Dr. Dusan Palic
 4211 Welbeck Dr.
 Ames, IA 50010-4018 USA
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All membership applications or renewals will receive an e-mail confirmation once processed.

**World Aquatic Veterinary
Medical Association**

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AVN Newsletter Editor
Dr. Nick Saint-Erne
Saint-Erne@q.com

One Profession; One Discipline;
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We're on the Web:
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WHO ARE WE

The mission of the World Aquatic Veterinary Medical Association is to serve the discipline of aquatic veterinary medicine in enhancing aquatic animal health and welfare, public health, and seafood safety, in support of the veterinary profession, aquatic animal owners and industries, and other stakeholders.

The purpose of the World Aquatic Veterinary Medical Association is:

To serve aquatic veterinary medicine practitioners of many disciplines and backgrounds by developing programs to support and sustain members, and the aquatic species industries that they serve.

To identify, foster and strengthen professional interactions among aquatic medical practitioners and other organizations around the world.

To be an advocate for, develop guidance on, and promote the advancement of the science, ethics and professional aspects of aquatic animal medicine within the veterinary profession and a wider audience.

To optimally position and advance the discipline of aquatic veterinary medicine, and support the practice of aquatic veterinary medicine in all countries.

The ideas presented in this publication express the views and opinions of the authors, may not reflect the view of WAVMA, and should not be implied as WAVMA recommendations or endorsements unless explicitly stated. Information related to the practice of veterinary medicine should only be used within an established valid Veterinary-Patient-Client Relationship.

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