

Wyoming State Veterinary Laboratory Newsletter – April 2008

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MESSAGE FROM THE DIRECTOR

Spring is almost here, more so in some parts of Wyoming than in others. This is also a good time of the year for the State Veterinary Laboratory to evaluate the past year and plan for the future. Much of the current Newsletter will be devoted to an assessment of Year 2007. I hope you find this information reassuring and interesting but first, some other items.

Personnel matters. Two faculty searches are nearing an end, both seemingly successful. Jonathan Fox has accepted the pathology position. Jonathan received his BVSc from the University of Liverpool in 1993 followed by a three-year residency in anatomic veterinary pathology at the University of Florida. After one and a half years as a pathologist at the Texas Veterinary Medical Diagnostic Laboratory in College Station, Dr. Fox earned a PhD at Virginia Tech University in 2002. Jonathan is board certified by the American College of Veterinary Pathologists and brings a wealth of knowledge. We are certainly fortunate to have him join us in Wyoming. Although not official, we are also very close to reaching an agreement with our parasitology candidate. Hopefully we can successfully finalize this search in the next few days. With personnel matters, it seems we're sometimes taking one step forward and two steps back. Our virologist, Dr. Ana (Nicky) Bratanich resigned effective this April. In the near future, we hope to begin searches for the virologist position as well as for a veterinary epidemiologist. It is obviously critical that we are successful in expeditiously hiring a virologist. These searches do take time and effort and in the interim, there are unavoidable gaps in providing the service we all strive for.

WSVL Laboratory Information Management System (LIMS). This year we are making a concerted effort to find a suitable replacement for the WSVL database and information management system. The current system has been utilitarian but it lacks features that would benefit our clientele and WSVL, features such as:

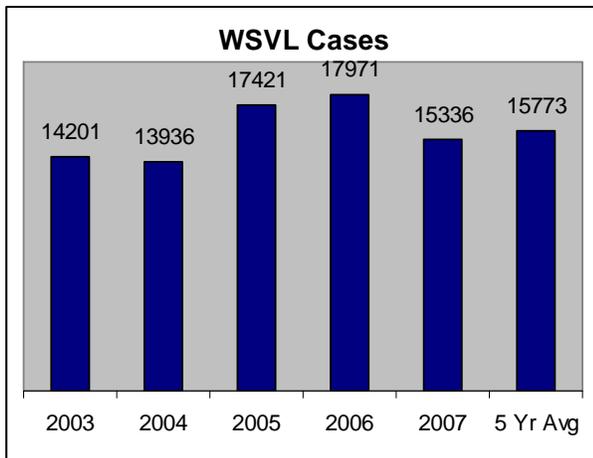
- Specimen tracking
- Automatic faxing or emailing reports according to client preferences
- Web-based viewing of reports and status of client cases
- User defined database searches and data retrieval

We are currently evaluating two LIMS. One is affordable but doesn't provide all we are looking for. One is attractive but initial and annual recurring costs are a concern. Additionally, we are continuing to evaluate other commercially available systems. This is an area where we must be diligent in identifying a reliable but affordable LIMS for the foreseeable future.

Summer Wyoming Veterinary Medical Association Meeting. Laramie will host the summer meeting of the WVMA June 15-16 at the newly constructed Hilton Gardens Inn and Conference Center. The WSVL has been tasked with providing the program for the meeting. There should be something there for everyone. Topics include a veterinarian's experience in the aftermath of hurricane Katrina, anthrax, economic tools to assess animal disease, animal cruelty and neglect, and sessions on diseases at the wildlife/livestock interface as well as equine, bovine, and companion animal disease topics and toxicology. I hope you will plan on attending.

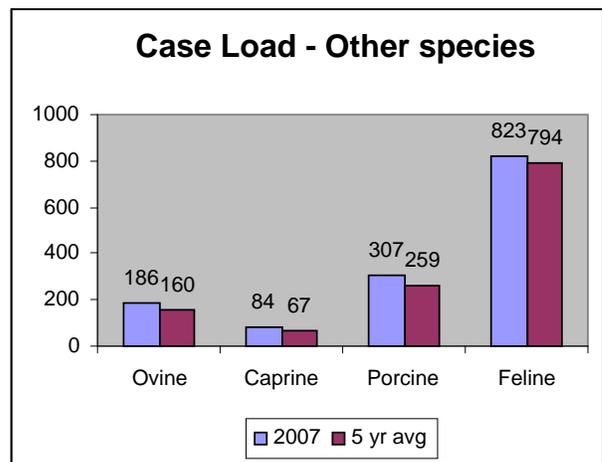
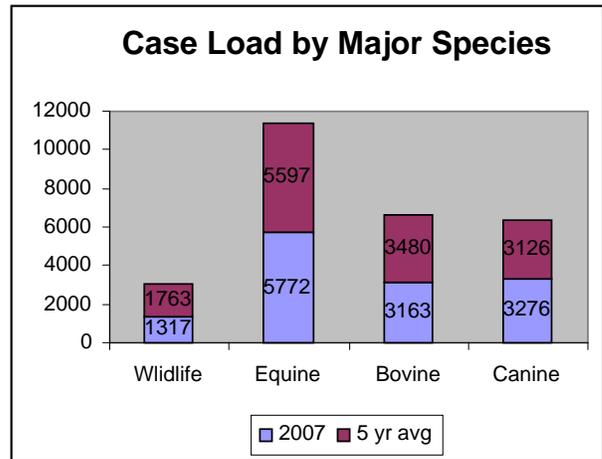
ASSESSMENT OF 2007 – WSVL

The total number of cases submitted to the WSVL for 2007 was 15,336. These cases vary from simple, single-assignment procedures such as a urinalysis or biopsy to complex cases where many of the different sections of the laboratory participate in the diagnostic workup.



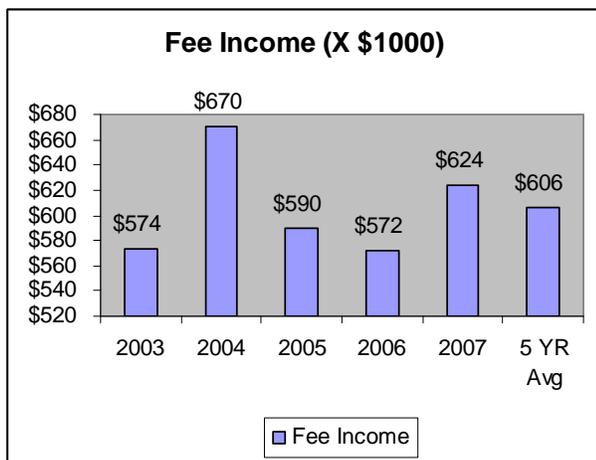
We would all like to see a healthy but realistic increase in case numbers. In a laboratory with a case load the size of WSVL total case numbers can, however, be distorted by dramatic changes in one species or in a specific test. The chart above suggests that the case load for 2007 dropped slightly from the five year average. It is important for us to delve deep enough into our database to understand why the changes occur. During 2007 wildlife cases, predominantly necropsies with full diagnostic workups dropped 34%. In the summer of

2006, the fee schedule for domestic animals was applied to wildlife accessions. The drop in wildlife case numbers can be directly attributed to triage in favor of those cases that would have a direct positive cost-benefit. Compared to the five year average, avian submissions dropped almost 67%. Here, the fall in case numbers is due to large numbers of birds necropsied as part of research projects in 2003 and 2004 as well as to a decline in the West Nile virus testing as this disease became established in the state. Overall, with the exception of bovine cases that dropped 9%, the case load increased for other species in 2007 compared to the average, ranging from 3% to 20% for the different domestic animal species.

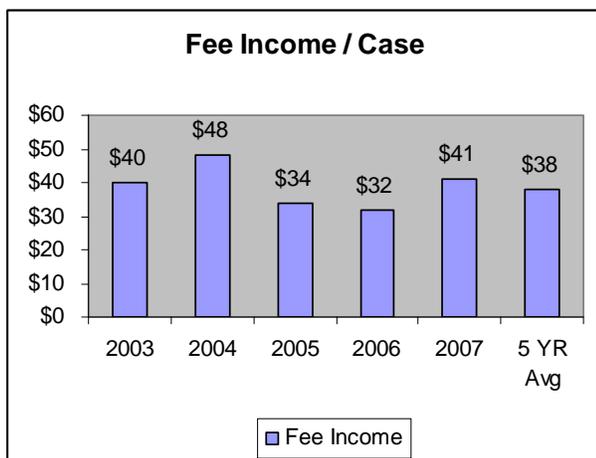


As mentioned previously, changes in patterns for a specific test can also skew the case load assessment. The five year case average is also skewed by the dramatic increase in regulatory serology testing (largely brucellosis) performed in 2005 (+25%) and 2006 (+15%).

Fee income is another measure that must be evaluated on a regular basis. Fee income generated by WSVL testing goes into a revolving fund. The revolving fund is one of the few that can be used for discretionary spending. The revolving fund is used mainly to support the day-to-day operation of the laboratory. The fund is also used to pay for faculty searches. The fund is, in addition, used to pay the Department's contribution for new faculty start-ups, the funds to help start or supplement research activities.



As you can appreciate from the above chart, fee income has not increased substantially in the past five years. This is a concern since the costs of testing and new equipment have, as you would expect, increased substantially during this period. This is even more of a concern when we realize that the fee income per case has also not shown a healthy but realistic increase (chart below).



We are fortunate that in the past few years the State has paid the salaries and fringe benefits for most of the Department's faculty and permanent staff. When the number of faculty and staff increase, as they must if the services offered by WSVL are expected to grow, we

must be diligent in insuring these new employees are moved to the permanent budget in a timely fashion.

Fee income and the State's contribution for salaries are not the only sources of funds for the Department and WSVL. The State has contributed \$97,260 annually for lab operations but this contribution has not increased since the early 1990s. I'm not a CPA but 2007 dollars do not go as far as in 1992. The Department and WSVL also received approximately \$930,000 in new research grants and contracts during 2007. Although the research grants do not in most cases provide funds specifically for the WSVL, a small percentage of the research grants is returned to the Department in the form of indirect costs and can be used for discretionary purposes. Contracts are made with the State as well as Federal governments to conduct surveillance testing for specific diseases such as brucellosis, avian influenza, and others. These contracts contribute indirectly to the mission of WSVL but allow little if any discretionary use of these funds.

In summary, the situation and future of the WSVL are optimistically bright. Case load and income are fairly steady and show no consistent, sustained decrease over the five year period. As mentioned, fee income is a concern that will need to be addressed but I expect no dramatic across-the-board increases in fees for WSVL testing. One strategy that will be implemented, with the consent of the WSVL Advisory Board, is an increase in the fee cap. It does little good to increase individual test fees without a concomitant increase in the fee cap for multiple assignments testing on individual animals. Conversely, an increase in the fee cap with no increase in fees for individual tests can help our bottom line. To compensate for the increase in the fee cap, fees for tests conducted in-house will be included in the maximum fee for single animal testing. This will include the new molecular tests and toxicological analyses that are currently excluded.

Don Montgomery

FROM THE WYOMING DEPARTMENT OF HEALTH

Plague in Wyoming and Reimbursement to Veterinarians of Shipping and Testing Costs

Recently released coyote plague serosurvey results from USDA/APHIS/Wildlife Services serve as a reminder that plague is present throughout much of Wyoming. Serosurvey results from 2005 to 2008 showed that the counties in the Big Horn Basin had prevalence figures in the 22 to 40 percent range. In Washakie County, 36 out

of 91 coyotes tested positive for plague. Of the five human plague cases that have occurred in Wyoming since the late 1970s, two of those cases have been in Washakie County.

WSVL has documented plague in animals in 20 of Wyoming's 23 counties but it is safe to assume that plague exists in every county in the state. Veterinarians and veterinary clinic staff throughout Wyoming are reminded to take precautions to reduce their risk of infection when working around a suspect plague case. These precautions can include wearing gloves and a mask, minimizing the number of personnel in contact with the animal, and confirming suspect cases by submitting specimens to WSVL. In addition, if an animal is confirmed to have plague, individuals should contact their health care provider to let them know of the potential exposure so an assessment can be made on the need for antimicrobial therapy. The Wyoming Department of Health should also be contacted by calling their 24/7 telephone response line at 1-888-996-9104.

The Wyoming Department of Health now has funds available to reimburse veterinarians for costs related to plague (and tularemia) diagnostic testing at WSVL. Shipping costs can also be reimbursed. The method for reimbursement is the same as that for rabies specimen shipping. To obtain reimbursement, veterinarians can mail an original receipt to the State Public Health Veterinarian at the address below. Shipping can be by USPS, UPS, Fed Ex or any other legitimate shipping vendor. Packaging and shipping of specimens should follow Wyoming State Veterinary Laboratory Guidelines that are posted on their website at <http://wyovet.uwyo.edu/Samples.asp> or can be obtained by calling 307-742-6638. Free shipping containers can also be obtained from the Laboratory.

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FROM THE WYOMING LIVESTOCK BOARD

As a reminder, the new Trichomoniasis rules require that veterinarians get recertified every 5 years to conduct the sampling and/or testing. Toward that end, we will be offering a "Trich" certification after the WVMA meeting. It will be held June 18 from 8:00- noon in the Woodard Classroom at the Wyoming State Veterinary Lab. Montana has recently adopted "Trich" rules as well and they require that any veterinarian collecting samples in MT take their certification course. This has caused

some angst among some WY veterinarians who practice in both states as they will now have to take two certification classes. Consequently, I have been working with the MT state vet's office to conduct a dual state certification program in Sheridan and perhaps some other northern WY/southern MT locales. No dates have been set, but we will let you know when they are.

There is a great deal of confusion among some pet owners regarding rabies vaccination. There are rules in Wyoming requiring all dogs, cats and ferrets that are *imported* into the state be vaccinated; however there is no such requirement at the state level for Wyoming native animals. However, many local jurisdictions require rabies vaccination, and do so using a variety of schedules - some require vaccination every year, some every two years, others recognize a three year vaccine. There is some concern (most originating out of state) that jurisdictional requirements for vaccination more often than every three years will increase vaccine-induced adverse reactions. All evidence I have gathered (both anecdotal and published) indicates that serious reactions attributable to rabies vaccines are extremely rare. If any of you have seen a serious reaction, I would be interested in hearing about it.

On the Brucellosis front there is good news and bad news: The good news is that the State Legislature and the Governor have approved increased funding for brucellosis testing and have given us (Livestock Board) more flexibility in how much we pay veterinarians. The Livestock Board is developing a policy on veterinarian payments, but I anticipate that there will be some kind of staggered payment – so that if you test 10 head you will get a higher price per head than if you test 100. In any case, sometime after July 1 veterinarians will begin getting reimbursed at a higher rate so hopefully producers will have little, if any, out-of-pocket expense (other than costs of gathering and working the cattle). The bad news is that the Wyoming Game and Fish Department reports that several elk herds in Park County have unexpectedly high brucellosis seroprevalence rates. These are not feedground elk and they only summer in Yellowstone National Park; thus these results are unexpected and are contrary to our previous understanding/assumptions about brucellosis epidemiology in elk. Most importantly, as non-feedground herds, brucellosis control options are very limited. Thus, the Wyoming Livestock Board is considering implementing additional testing requirements for Park County cattle.

We continue to receive suggestions regarding Bovine Tuberculosis testing requirements for rodeo cattle that come into Wyoming. Indeed, we have gotten several suggestions and complaints regarding many of our

animal import requirements. For this reason, we are having an informal public comment on our import requirements on May 14 at 10:00 am at the Armory Building at the Fremont County Fair and Rodeo Grounds, which is located at 1010 Fairgrounds Road, Riverton. Veterinarians are encouraged to attend and provide comments. If you would like to review the current rules prior to the meeting, they are available on our website at: <http://wlsb.state.wy.us/> look under our rules section (at the top of the page) and choose “Chapter 8 Livestock Board Import Rules”.

There has also been considerable discussion regarding disease traceability and animal identification. Many have suggested that we in Wyoming should abandon the National Animal Identification System (NAIS) and develop an identification and tracing system of our own. Others believe we should be a leader in NAIS development. While some prefer a voluntary system, many believe that only a mandatory system will provide adequate traceability. So that we can hear and consider all sides we are continuing the afternoon of May 14 from 1:00 P.M. to 4:00 P.M. with a listening session on animal ID/ Disease Trace Back (address same as above). There will be a similar meeting to be held during the State Fair (planned for Aug 13). Based on feedback from these meetings, the Wyoming Livestock Board will propose animal identification and tracing rules or regulations. We very much want to hear from veterinarians at these meetings- so please attend one if you can.

If you have other issues or concerns please feel free to contact me. My email address is: wcook2@state.wy.us (don't forget the “2”); my office number is (307) 777-6443.

Walt Cook
Wyoming State Veterinarian

VETERINARY EXTERNSHIPS

As most of you know, the Department of Veterinary Sciences and WSVL offer two separate externship programs for students in their 3rd or 4th year of veterinary school. The Wildlife Disease Veterinary Externship has been very successful, to the point that this externship is currently offered only to those students in the 4th year of veterinary school. The Williams-Thorne Wildlife Disease Training fund provides stipends to students in this externship to help offset travel and accommodation for these students. The more general Diagnostic Externship has not been as successful but is gaining momentum. This April, two 4th year veterinary students from Michigan State University enrolled in the externship at their own expense. Chad Frank will

graduate this May and has accepted a pathology residency at Purdue University beginning this summer. Lisa Bartner is seeking a position in companion animal clinical practice but is contemplating further formal training in veterinary pathology as well. The College and Department are in discussions with a potential donor to establish an endowment that will help defray the expenses for students enrolled in both externships.



Lisa Bartner (left) and Chad Frank (right) performing a necropsy on a kitten under the supervision of WSVL pathologist Dr. Shannon Swist.

More information concerning these externships can be found on the Department's website at <http://uwadmnweb.uwo.edu/VETSCI/>.

Don Montgomery
Pathologist and WSVL Director