September Update

Hello,

I hope everyone had a fantastic summer. I am currently writing this report in the student center, watching the wind shake the trees barely touched with bright red and orange. It's also cold and rainy but what else would you expect from the end of September. Here is an update on what I've been doing the last couple months. As I poured over maps and research papers, there was something really cool that I came to realize. Because a thorough study hasn't been performed on the disease and its cause, we've been granted a rare opportunity to be the first group to catalogue and archive many facts that, before this summer, were just a scattering of reports, notes, and pictures posted online. Not only that, but because this is the first investigatory study of the disease, I am able to bring in any information I can find, including citizens who care about their lakes and write them into my report, with their permission of course. This isn't something done in the field but, because it's my study, I can present the information in the way that best fits the story.

Over the summer, I gathered documents from Aaron Cole, Facebook, and fish labs across Wisconsin, putting them in one location to be digested and to create a report detailing what we know so far about Black Crappie Sarcoma and its possible cause. You're probably asking, "Facebook?" yes, Facebook. I was grateful to the Rice Lake Parks and Recreation for sharing the press release on the social media platform. People shared the post and talked about their experiences with the disease and I was able to talk to them on some of their claims individually. This provided some anecdotal evidence that is going to be used for characterizing this disease for future diagnostics if it continues to spread. Two citizens reported that it was also found in Tainter Lake in Dunn county. To confirm this, I am planning a trip with the UW-Stout Fisheries Club to find evidence. I'm hoping it's not there, but we'll find out by November, hopefully. I also received three very detailed emails from fishermen about their experiences with the fish including size, coloration, and time of year when they encounter it. These stories will also be put into the report as anecdotal evidence.

I will be continuing to work on the BCS report for the next month or so. If you or anyone else has any other information on this, please send me an email. I will send it to you in the October update report. If more information comes to light after November, I will send an updated version.

Here are some things that are in the works at the moment:

I have someone working on an epidemiology map, showing the routes of transmission through the lake systems and formulating some hypotheses for the outlying lakes that are not connected to any other system. I'm hoping to receive this by the end of November. This piece also includes writing a report looking at the confirmed lakes, looking into lake quality, known contaminants, depth, size, etc. So far, according to our analysis so far, it appears that there are no common traits between lake systems which could rule out some forms of bacteria or vegetation that could be releasing something into the water.

In the lab, we are currently processing the specimens we received by taking measurements and comparing them to the anecdotal evidence I've received from fishermen. Along with images, we are noting age, length, weight, and gender. We are also processing fin clippings for long term storage so that we have material for genetic analyzation in the future, most likely the spring.

Also, we will be beginning a protein study on tissues at the end of October to provide evidence that there is a pathogenic cause to the disease. We will be taking samples of the heart, tumor, and apparently unaffected muscle tissue, pulling out their proteomes, and comparing the two. If we're lucky, it will provide some concrete evidence of a pathogen. We are presenting these findings at a small conference on campus and I will relay any information that we find.

We are also planning to take a tour of the La Crosse Fish Health Center and take a look at their techniques for viral identification. Rumor has it that they also have two samples of unknown virus isolated from a BCS affected crappie.

In summary, although the school year has made things move a little slower than the summer, I am still processing information and drawing up large scale projects to tackle in the next couple months. In terms of budget, I am incredibly grateful for the lake associations and citizens who have donated to the project. Listed at the end of this report is the amount of money we received from lake associations over the last two months. I've been hesitant to spend it until we have a solid plan laid out that I cannot get alternatively funded. The protein project is being funded by a professor of mine in the guise of a class project. All genetic work, imaging, and molecular tests will be coming from the donations I've received, and I want to be sure that the tests we run will return information of value.

Again, I want to thank those who have supported the project and have contributed information or money to find answers. If there are any questions, please do not hesitate to let me know via email: boydk0133@my.uwstout.edu.

Thank you,

Kayla Boyd

Current funds:

	Donation Amount
Bone Lake Association	$2,000
PCLAR	$300
Pipe and N. Pipe Rehabilitation and Protection District	$500
Citizens (2)	$200
Lake Wapogasset/Bear Trap	$2,000
Total:	$5,000