

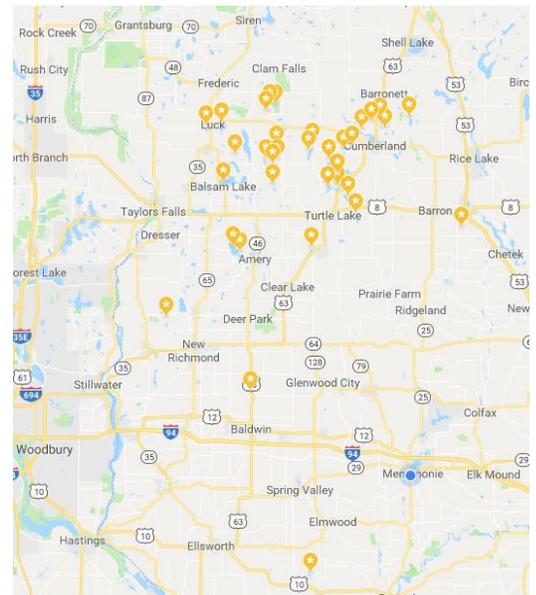
# Black Crappie Sarcoma Virus

Black Crappie Sarcoma is a disease affecting up to 35 percent of black crappies in affected lakes. Some symptoms associated with BCS are red sores on the sides and fins, bleeding from these areas, and occasionally a large tumor. The fish disease has been reported in 20 Polk county lakes, 13 in Barron, two in St. Croix, one in Pierce, and one in Washburn. A Wisconsin DNR histopathology report was completed in 2015. Since then, no further study has been done while the disease seems to be affecting more fish and becoming apparent in more lakes. Some lakes affected, such as Lost Lake, have no public access yet still carried the disease. Some lakes in Polk County do not contain any crappies that show these symptoms. It is not yet known if BCS is lethal to the affected fish or if consuming those fish are harmful to humans. The Wisconsin DNR currently suggests that if a sick fish is caught, that it should be thrown in the trash.



A crappie showing BSC symptoms

Students at UW Stout Biology Department are undertaking a project to further explain black crappie sarcoma. The study is focusing on identifying the pathogenic cause of the apparent tumors and hemorrhaging. Past investigations into BCS took a traditional histology approach to look at tissue structure, but it was not conclusive on whether it was a virus causing this and, if it was, what kind of virus it is. This study will approach this problem at a molecular level to understand the underlying causes at play. The previous DNR study was limited to optical microscopy. Sometimes what we see with our eyes is not the full story. Researchers on this project will be identifying the cause of BCS by looking at the proteins being expressed by sick individuals compared to healthy individuals and looking at genomic DNA of black crappies. The current estimation of this project's cost is \$7,000 to sequence DNA and purchase supplies. We are asking donations from individuals and lake associations as the university cannot fund the project. Those who donate will receive periodic updates on progress. Donors can also request a ledger showing what our funds are being used for.



Lakes Affected

Currently, the students are analyzing related studies of walleye sarcoma and whether that procedure can be performed on black crappies. The goal of this preliminary study will be to characterize what we find and present the findings to molecular biology conferences. Additional studies about how fish are being infected are planned after this study is complete.

If you have caught a fish showing symptoms, please take a picture and send it with the date, lake, and (if possible) where on the lake the fish was caught and email them to Kayla Boyd at [boydk0133@my.uwstout.edu](mailto:boydk0133@my.uwstout.edu).

If you are interested in helping fund this project, donations can be sent to the following address with checks made out to "Black Crappie Sarcoma Project":

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