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### **Gardner-Webb Honors Student Presents Research on Campus Water Quality**

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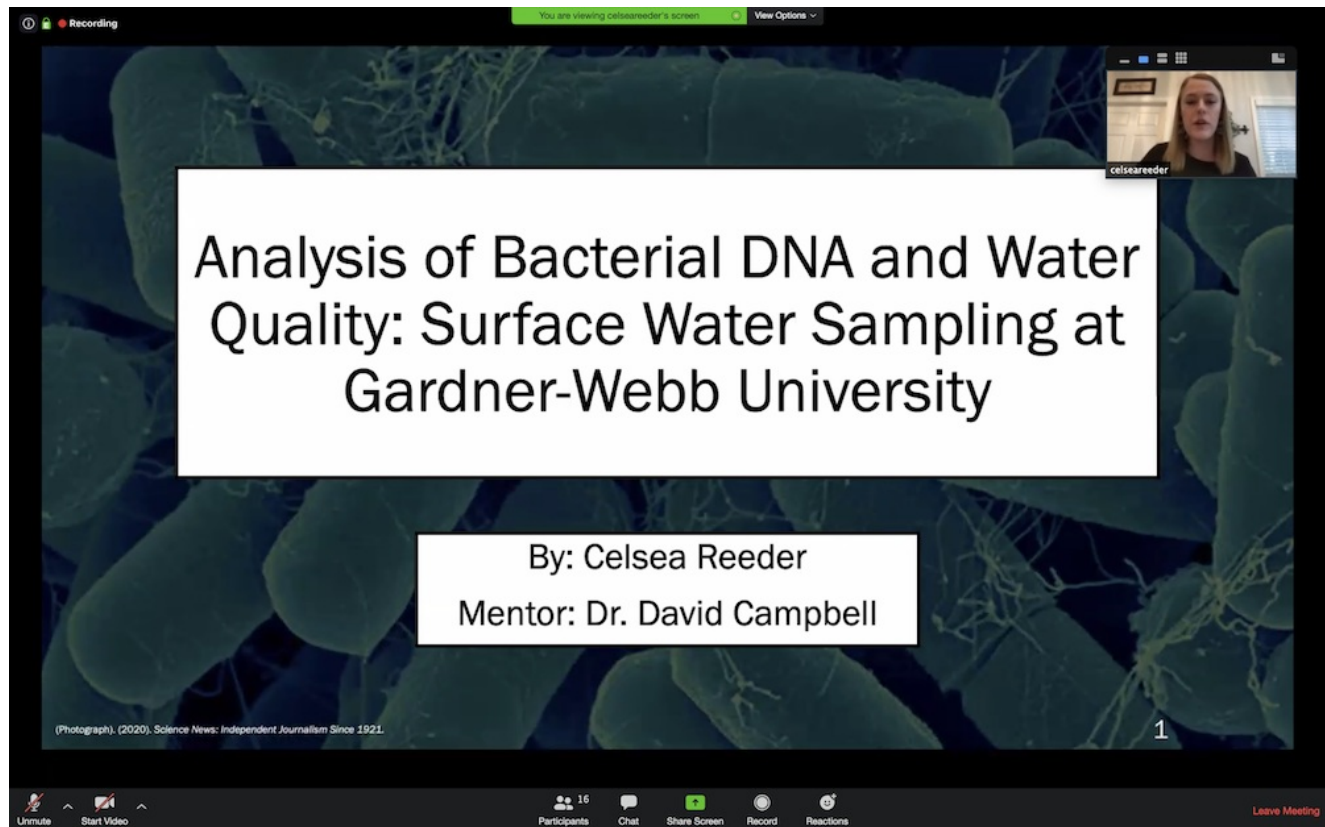
# Gardner-Webb Honors Student Presents Research on Campus Water Quality

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Office of University  
Communications

May 7, 2020

## *Celsea Reeder, '20, Learns Skills That will Help her in Veterinary School*



A screenshot of Celsea Reeder's presentation made during the Gardner-Webb Honors Zoom teleconference. Photo courtesy of Joy Smith, GWU Student Photographer

Celsea Reeder, '20, of Salisbury, N.C., recently culminated her Gardner-Webb University experience by presenting her Honors thesis in a Zoom teleconference. The University's Honors Program hosted the virtual event because of Coronavirus social distancing guidelines. Reeder earned a degree in biology with a concentration in biomedical sciences and minor in Spanish.

In the fall, Reeder will attend veterinary school at North Carolina State University's College of Veterinary Medicine. She plans to pursue mixed animal medicine, which has been her dream since she was 3 years old.

Her research topic was "Analysis of Bacterial DNA and Water Quality: Surface Water Sampling at GWU."

**Q: Why did you choose your research topic and how do you feel about what you have learned?**

**Reeder:** For my research project, I chose to analyze and determine what types of bacteria are present within the natural water sources on Gardner-Webb's campus. Additionally, I determined the water quality of these sources. I grew up living on High Rock Lake, and I've always loved being in and around the water. However, when I was little, I cut my hand on a piece of glass while swimming in High Rock Lake. If the cut were any deeper, I would have lost some functionality of my hand. Fortunately, I made a full recovery, but this incident sparked a deep passion to teach others about the dangers of water pollution. I became interested in



learning more about what exactly is within our water systems. This is why I wanted to analyze the bacterial strains present within the natural water sources on campus, as well as the water quality. The curious part of me wondered about any possible pollution that would affect the bacterial types that were present, or that would affect the water quality. The veterinary part of me was wondering how wildlife would be affected by the quality and contents of the water sources.

**Q: What valuable lessons did you learn from doing your research?**

**Reeder:** I learned valuable lab and research skills that I know I'll carry with me into veterinary school. This thesis has strengthened me, and the writing process has helped to improve my writing skills. I also learned about the funding that is available for research projects such as these. Without funding, this research would not have been possible. I want to thank my thesis mentor, Dr. David Campbell, for all of his help and guidance throughout the research and writing semesters of my thesis. I would not have been able to complete this thesis without his help, and the generous funding of the Natural Sciences Department and the Honors Program. For that, I am extremely grateful.

**Q: How has the Honors Program enhanced your GWU experience?**

**Reeder:** With this program, I was able to make so many new friends and to step outside of my comfort zone. My favorite events with the Honors Program were always our "Try

Something Different” (TSD) events, where we would go ice skating or try a variety of foods at different restaurants. I am truly going to miss the Honors Program when I graduate, but I am thankful to have been a part of it.

*Located in the North Carolina foothills, Gardner-Webb University is a private, Christian, liberal arts university. Gardner-Webb emphasizes a strong student-centered experience and rigorous academics to prepare students to become effective leaders within the global community. Ignite your future at Gardner-Webb.edu.*