Trout in the Classroom Essay - Christopher Sigmon

In my viewpoint, this essay contest is a very rewarding and special opportunity, and I am honored to have the chance to participate in an activity related to this subject. I am also honored to be considered as a person of choice for such a reward. Although science is not the future career or subject I currently have in mind, I would never complain about an opportunity to learn more about something new or to take part in an honorable activity. My potential stay at the camp is very exciting to me, and the activities offered sound enjoyable and are definitely something I can participate in without hesitation.

Conservation is extremely essential to this planet and is a practice that should be followed by all people, but it is sadly not done due to the ignorance of many social communities. This is why I believe it is great for schools to teach conservation to young adults and educate them on the many positive effects it can have on our planet's future. Without conservation, if humanity continues the practices it is using today, both humanity and the rest of the planet are extremely endangered and at risk of severe consequences within the next century.

This is an opportunity I am more than willing to take, and I am prepared to carry out the actions needed to further my understanding of this subject. A potential scholarship is very rewarding and appealing, along with the many educational benefits I could gain from attending this camp, as well as the fun experiences and activities I could enjoy with others. My name is Christopher Sigmon, and this is my essay on stream conservation and how TIC helped me better understand it. It is my honor to be writing this for whoever may read it.

What is water conservation, you ask? It is the action of protecting, managing, and preserving bodies of water and rivers so they can maintain their natural purposes and functions. These include ensuring clean water, stable banks, healthy wildlife habitats, reduced pollution, natural water flow, and overall safety of water ecosystems.

There are many measures of water quality that my teacher, Mrs. Luce, has taught us about. One of these is temperature. Colder water is healthier because it allows more dissolved oxygen to be present. Another measure is turbidity, which refers to the cloudiness of the water. Water is healthier when it is less cloudy because excessive turbidity can block the sunlight needed by plants and reduce dissolved oxygen levels. Dissolved oxygen is another important factor, as higher levels prevent fish from suffocating. Many factors can affect dissolved oxygen levels in water.

Another measure is pH, which refers to the acidity or basicity of the water. Healthy water should not be too acidic or too basic. The average pH is around 7, with a healthy range between 6.5 and 8.5. If pH levels are outside

this range, the water becomes unhealthy and can put organisms at risk. Excess nutrients in the water can also be harmful, as they can cause excessive plant growth, which blocks sunlight and depletes dissolved oxygen needed by other organisms. Additionally, too much bacteria in the water is dangerous because harmful bacteria can cause severe diseases that negatively affect wildlife.

I have studied the evolution of trout both in person, using the fish tank in our classroom, and digitally through the Trout Project.

First, the trout began as eggs in the tank. Over time, they hatched and became very small but visible trout known as alevins. During this stage, they swam in the tank, which was regularly maintained and provided with food. While the tank is a healthy environment, it offers limited space compared to a natural habitat, which is usually larger but often less healthy due to pollution and human activity.

Next, the trout grew over time and entered the fry stage. At this point, they began to resemble adult trout but were still very small. Ms. Luce continued to maintain the tank carefully and ensured the trout were fed and cared for properly.

Then, the trout reached the juvenile stage, where they started to look like fully grown trout but were still not quite large enough. I believe this is the current stage of our trout, although I am not entirely certain. The trout are still receiving excellent care, thanks to my amazing science teacher, Mrs. Luce. I would like to thank her for being a great teacher and caretaker.

Finally, the last stage is the adult stage, which is the most well-known stage. This is when trout are fully grown and capable of producing offspring. Our trout have not reached this stage yet, but I am excited to see how they will look when fully grown. Once they reach adulthood, they will be released into streams during a field trip, as a fish tank is not suitable for adult trout.

From completing the Trout Project, I learned a great deal about trout anatomy, life cycles, and the conditions they need to survive in water. Stream conservation is the practice of protecting bodies of water and the ecosystems within them, including trout, which are a protected species. Trout are very sensitive to polluted water, which is why conservation is so important. One of the most important parts of stream conservation is preventing water pollution.

People who study trout and those who support stream conservation understand that unhealthy water is extremely harmful to fish. Trout are one of the species most affected by water pollution. Through this project, I learned that stream conservation needs to be practiced more within communities to prevent species like trout from becoming endangered and to ensure healthier water systems for both humans and wildlife.

In summary, stream conservation is the practice of maintaining healthy water ecosystems for both human use and the organisms that depend on them. It benefits individuals, communities, and the environment as a whole. Through the Trout in the Classroom program and the Trout Project, I learned not only about trout but also about the entire ecosystem that can be endangered without human care. Trout are sensitive fish that do not tolerate pollution well, but they are not the only species affected. Humans must take action to reverse harmful practices so we do not lose entire ecosystems that we rely on to survive.

I believe everyone should practice stream conservation to protect our local water ecosystems for both humans and wildlife. These programs taught me about trout life cycles, anatomy, diet, and survival, as well as how those concepts apply to other species and ecosystems. I am honored to have written this essay and hope you found it both informative and enjoyable. Have a wonderful day, and thank you for reading!