

Discussion

We have reached the end of the semester. And so far the aquaponics system has been successful in growing plants and keeping the fish healthy. However, like all projects, we encountered a few problems along the way. Some of these were easy fixes. While others took a little more time and effort to resolve. This section will discuss the problems we encountered, how we solved them, and improvements on the project that can be made in the future.

Early on we discovered the plants were getting too much light. This was solved by simply turning off the lights when we left for the day. We tried using perch in our aquaponics system, but they weren't the ideal fish. They could not survive at room temperature. The solution to this problem was switching to goldfish. Goldfish were easier to maintain and could survive within the temperature range. We also tried to set up an automatic fish feeder. This was not successful because the flakes were getting stuck inside the feeder. We tried to solve this by changing their diet from flakes to pebbles. Shortly after, fish began to die. For this reason we changed it back to flakes and now feed them manually.

Going forward there are a few improvements that could be made to the project. We could add a ph sensor to monitor and maintain a set ph level. The enclosure for the aquaponics system could also be improved. By adding a panel to the front, which could be conveniently opened. Lastly, we could find a better fish food for the goldfish. One that doesn't get stuck in the feeder and doesn't potentially harm the fish.