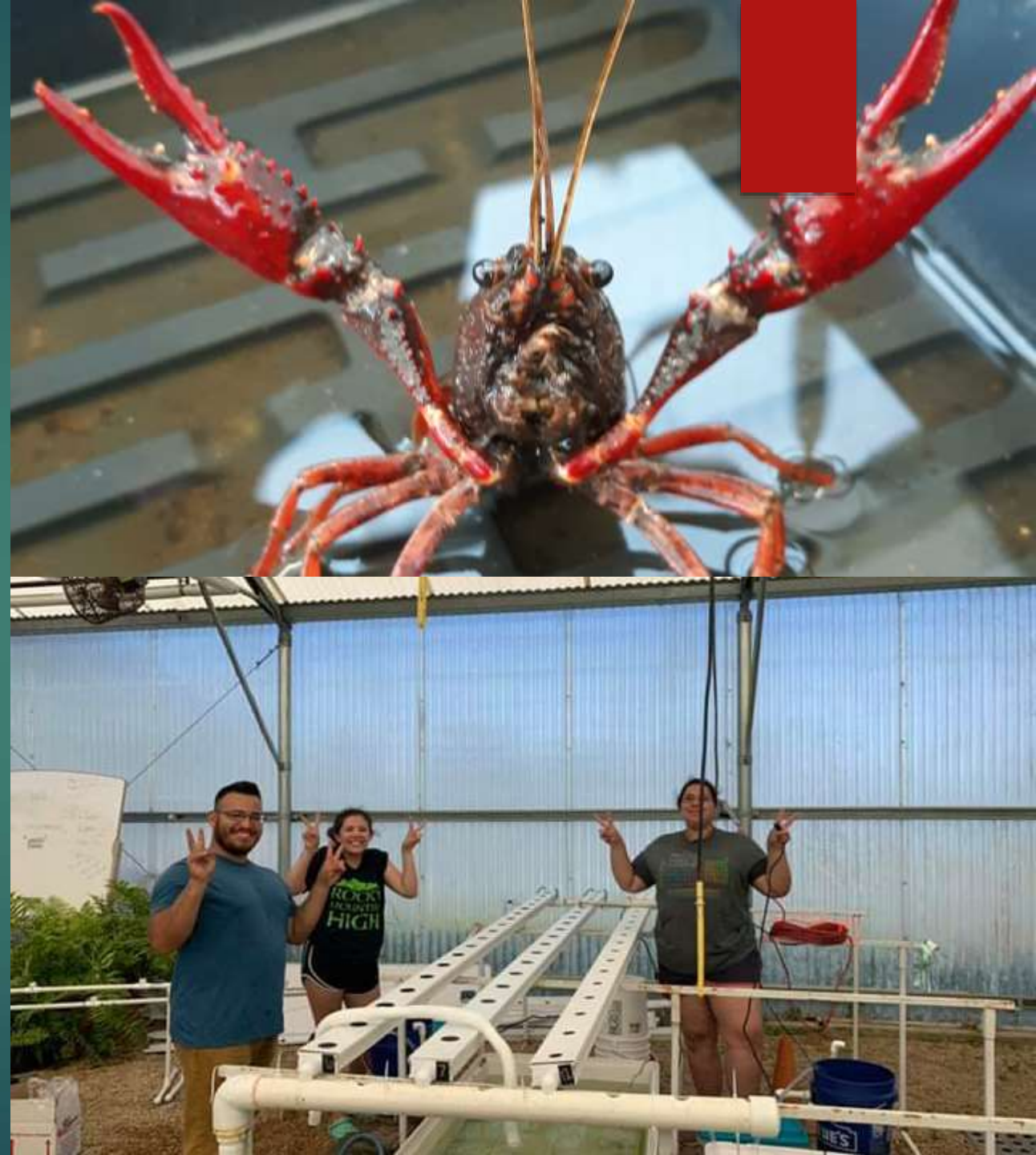


N.F.T vs. D.W.C

Gabrielle Alanis
Savannah Santos

Summer 2019



The Build

- ▶ Drilled holes and placed in net pots for D.W.C. Placed three polystyrene rafts in N.F.T
- ▶ Measured and assembled both systems.
- ▶ We built the biofilter using shower luffas for beneficial bacteria to thrive and the swirl filters for solid waste filtration. Both filters were attached to each system.



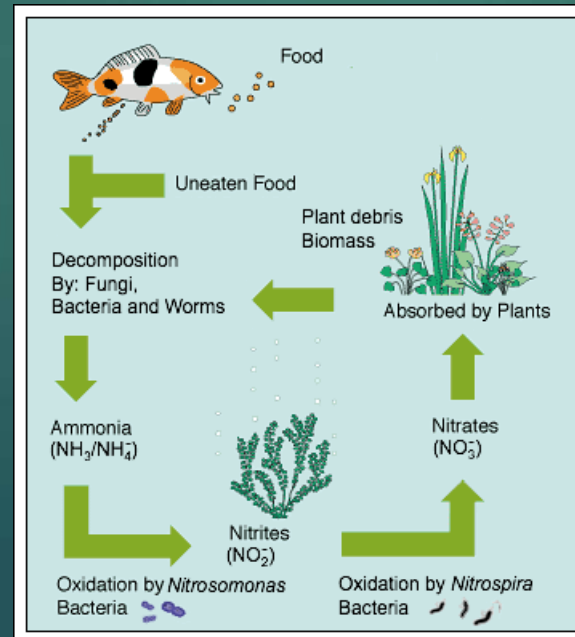
Filters

Attached to the system

Swirl Filter

- This filter is for removing solid waste.
- Water is pumped from the reservoir into the swirl filter. Waste particles sink to the bottom of the bucket while filtered water remains at the top.

- Filtered water then drips into our Bio filter.



Bio Filter

- This is where the nitrification process occurs.
- We used luffas sewed into a mesh bag to be home for beneficial bacteria colonies.
- Nutrient dense water from the biofilter then flows to the plant roots.

Red Swamp Crawfish (*Procambarus clarkii*)

- We placed 30 crawfish in each reservoir with pipe for shelter.
- The crawfish began to establish dominance and territory but after thirty minutes they became acclimated.
- We added an air pump



Plumbing and hook up



We cycled both swirl and bio filters after attaching them to our systems.
The N.F.T filtration system was set up on a table top



Plant Growth

June 17, 2019 DWC



June 21, 2019 DWC



June 21, 2019 NFT



June 24th, 2019 DWC



June 24th, 2019 DWC



June 24th, 2019 NFT

