Biology, Ecology, & Aquaponics

Inland waters cover less than 1% of the Earth's surface yet harbor 10% of all known animal species. Of this diversity, over 60% is found in the aquatic insects, which today number close to 100,000 described species. Students learn about aquatic insects during the first 2 weeks and build an aquarium as a class. Afterwards, the students pick an insect to rear in an aquaponic environment. The 3rd week is spent learning about the needs of their chosen insects. Students will research things such as: water temperature requirements, water chemistry, ideal plant, and a variety of other topics. They present it to the class on the last day. Students will be presented with several careers in Biology and Ecology.

Day 1-2: Introduction to aquatic insects
Day 3-4: Insect's Roles in freshwater systems
Day 5: Insects and plants in nitrogen cycling
Day 6: Aquaponics inputs
Day 7: Water chemistry
Day 8: Plant Life
Day 9-10: Aquarium planning and building
Day 11: Insect and presentation planning
Day 12: Careers in Biology and Ecology