

Jayden Edson, Jonathan Belcher & James Rindt
Underwater Invaders

The purpose of the project was to design an underwater robot that is capable of early detection of zebra mussels. Zebra mussels are an invasive species that pose as a threat to many water sources around the US. This robot must be able to take samples off of surfaces and bring them back to the surface for further examination under a microscope. The procedure consisted of placing the robot in a body of water, using the thrusters to move the robot to a solid surface, then use the scraper to collect samples off of the surface. The robot was placed and tested in a real river at Blue Valley Ranch. The robot was able to efficiently collect samples off of rocks in the river. It would be logical to conclude that the robot is able to successfully take samples of potential zebra mussel larvae in a real life environment.