

Our team is **KayAk**, we are two 7th grade students at Ideaventions Academy, (in Reston VA, USA). This is our first time competing in SeaPerch or any other competition like this and we're very excited.

Results and Discussion

When doing our research before we started designing, we were very surprised to learn that most devices currently on the market that are designed to observe the underwater environment cost upwards of \$350.

Budget and Materials

The materials we used for the ROV:

- PVC pipe (\$6.91)
- PVC pipe connectors (\$6.30)
- Pool Noodle (\$0.49)
- Zip Ties (\$0.14)
- 3 Motors (\$3.95)
- Underwater camera (\$31.99) [link to camera](#)

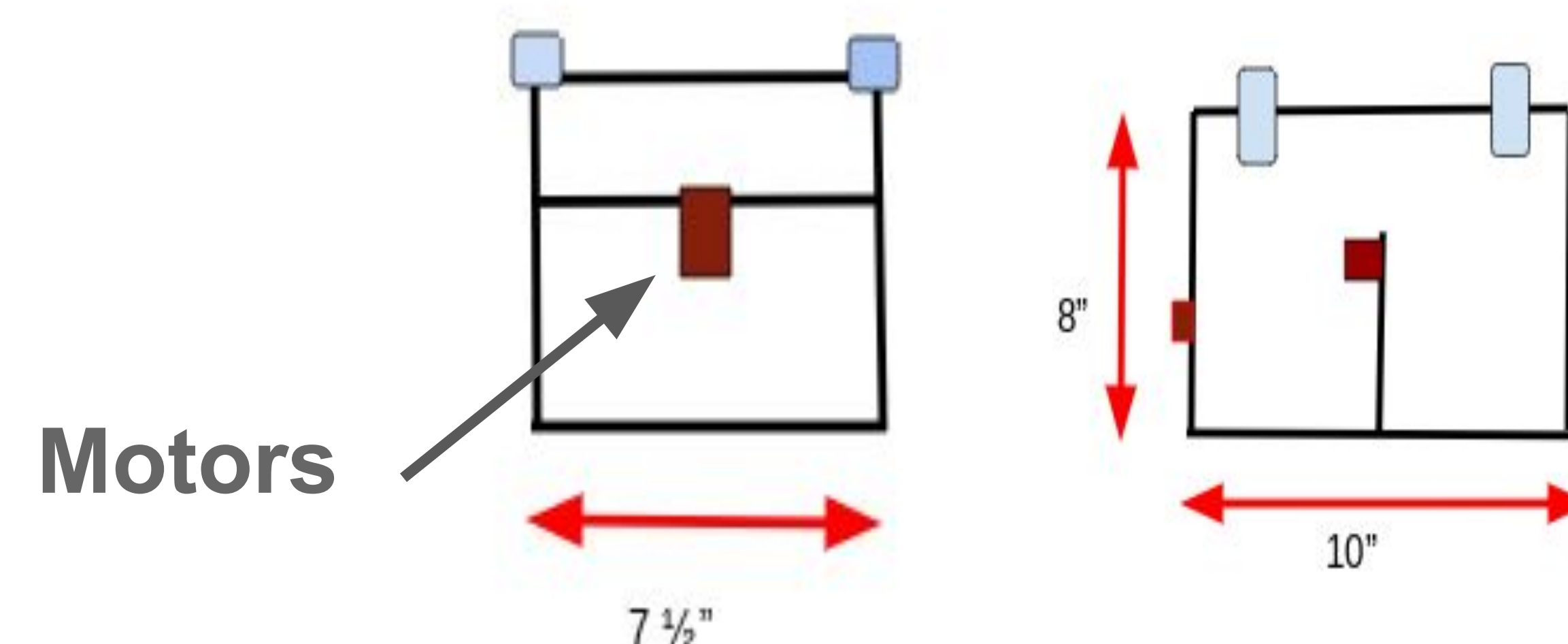
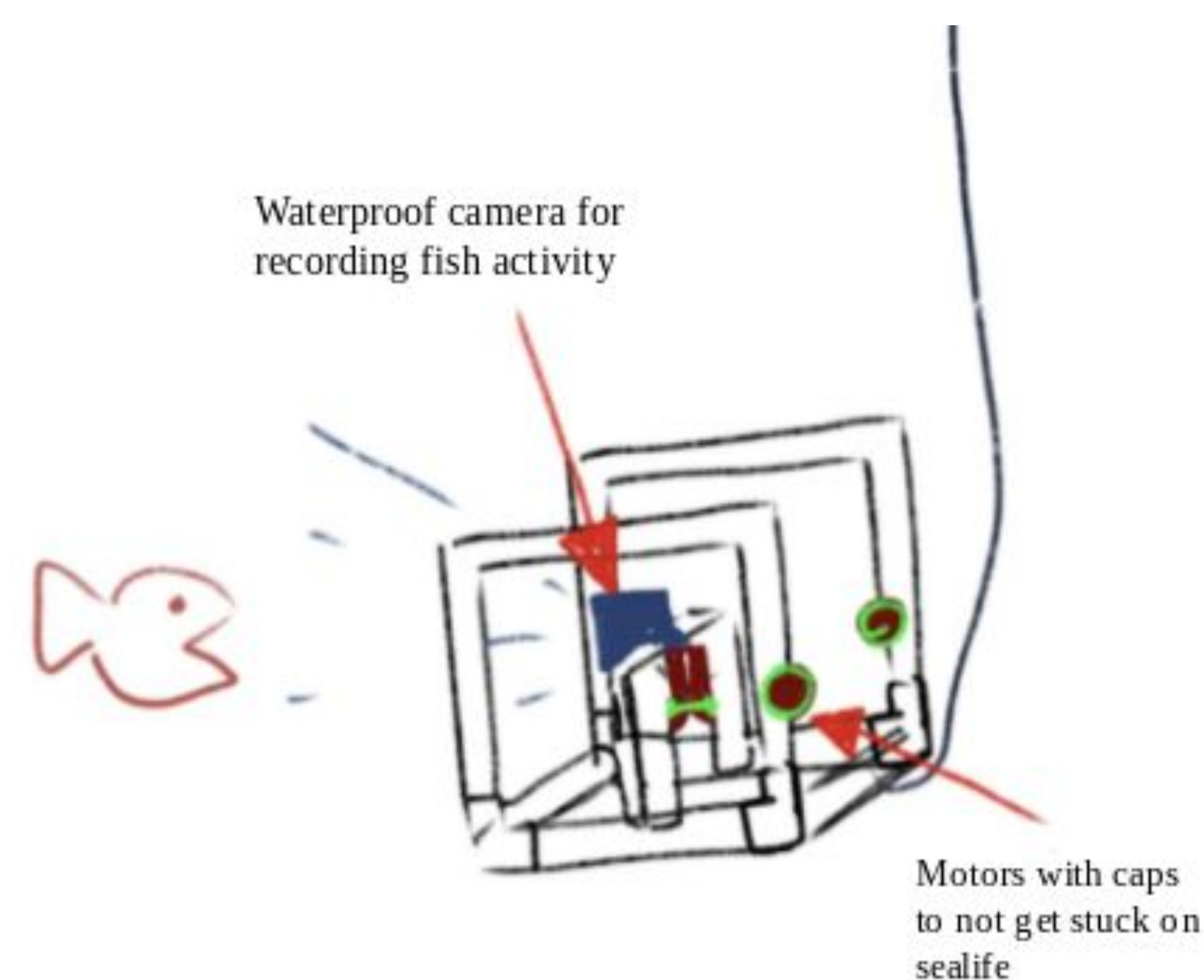
Total Cost: \$49.78

U.F.P.R.P.

Underwater Fish Photography and Research Project

Abstract

Our goal for this project was to create an inexpensive way to help enthusiasts photograph fish and contribute to the research of aquatic life. In order to pull this off, we designed a seaperch with a camera that can get to places that humans can't and inconspicuously observe marine life there for under \$50.



Next Steps

We'd love to actually put this project to work and are considering building it as a fun summer project.

Design and Reasoning

Our ROV is designed to be hydrodynamic, small so that it propels itself faster underwater. We put a cap-like cover on the motors so that it doesn't damage or get caught on anything underwater, while also keeping the momentum the propellers produce.

Conclusion

From this project, we've learned that often fancy, expensive products, such as underwater ROVs, can be built inexpensively while also providing a solid learning experience.