



CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s) Casey H. Stolberg	Project Number J0829
Project Title Robofisher	
Abstract	
Objectives/Goals My objective for this project was to build a remote controlled fishing boat, with a remote controlled reel, and catch fish with it.	
Methods/Materials Fabricate Boat Hull 1. Cut and bond foam sections into the shape of a hull using an exacto knife and Super 77 Multipurpose spray on adhesive. 2. Cut out pockets to accommodate the Reel Assembly Electronics and components and the Zig Zag Racer (remote controlled boat used for propulsion and steering) 3. Cut a slight slope into the back approx. 4cm in, install line guides in rear sides 4. Sand, shape smooth, and fill in any imperfections or gaps with wood putty, Epoxy and Paint as desired Procedure for reel: 1. Remove reel handle, and machine a threaded hole into the center of the reel jam-nut that matches the output shaft of the reel motor 2. Assemble drive motor to reel for clockwise rotation, drill mounting holes in bracket and mount reel assembly 3. Assemble and solder wires all wires in the reel assembly and Remote control relay per manufacturer instructions 4. Test remote control to verify operation	
Results Well, a bigger boat needs a bigger rudder to be able to turn tight circles. More power is better than speed when reeling in a fish. Don't drop electric motors into ponds. And finally, you can build a remote control boat that catches fish.	
Conclusions/Discussion My hypothesis was correct; you can remotely catch a fish. First you must construct a boat that has a hull like a real boat, so that it can sail through the water easily. Also, a large boat needs to have a large rudder or it can not turn as easily as it should. You need to construct a motor that can turn the reel fast enough to reel in the fish. The closer your remote is to your receiver, the faster the signal gets to it. As seen in my observations, using bait and a bobber was the best method to catching a fish. Lastly, water-logged electric motors do not perform well, actually, they don't perform at all.	
Summary Statement Building a remote controlled fishing boat with a remote controlled reel that can catch fish	
Help Received Dad had reel specially drilled to fit motor; Family friend soldered wires; Mom and Dad helped with display board	