



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> Arielle Meininger; James Welsh	<b>Project Number</b> <b>J2414</b>
<b>Project Title</b> <b>Snap, Crackle, Rockfish</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Our project is about fish recompression and the corneal crackling, exophthalmia and ventilation rate that occurs in rockfish species after they are decompressed. Fish recompression is when we recompress a rockfish in a compression chamber after it has been brought up from 180 or more feet. Our question is: How do rockfish recover from barotraumas when they are compressed? We went fishing for Rosie, Vermillion and Green Stripe rockfish. We are trying to find how long the crackling lasts and how much psi it takes for the exophthalmia to go away. We also looked at how much the fish ventilates per minute when it is in the chamber.</p> <p><b>Methods/Materials</b> We rated the severity of both from one to ten. We also filmed the fish when he was in the chamber.</p> <p><b>Results</b> We found that it took up to four and a half hours for the crackling to go away. It also took up to 70 psi or 150 simulated ft. for the exophthalmia to go away.</p>	
<b>Summary Statement</b> Our project is about how rockfish recover from barotraumas when they are brought up from deep depths.	
<b>Help Received</b> Father helped with gathering reaserch	