



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

<b>Name(s)</b> Ryan D. Ghisetti	<b>Project Number</b>  31044
<b>Project Title</b> Which Wood Would You Buy?	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My project was to determine which type of wood produces the most heat in relation to the cost per cord. It also compares burn length to determine the efficiency of each type of wood.</p> <p><b>Methods/Materials</b> Five different types of wood were used in my project: oak, madrone, pine, fir and redwood. As each wood was burned, the highest temperature was recorded along with the length of burn time. The results were converted into BTU's/dollar and BTU's/minute. Each wood was retested to verify results.</p> <p><b>Results</b> Fir is the hottest burning wood tested. It is the best type for getting quick heat and it is the most cost effective. If you are looking for a wood to provide heat and a long burn time, fir would be the best option. Fir is an excellent all purpose wood. Madrone is a good wood for burning for long periods of time, but is more expensive and doesn't burn as hot.</p> <p><b>Conclusions/Discussion</b> Fir is the most cost effective wood, it averaged 50,227.2 BTU's per dollar paid. Madrone burned the longest. Fir also is the best overall wood, it tested well in heat production and burn length.</p>	
<b>Summary Statement</b> My experiment was to determine the cost effectiveness of wood used for heating.	
<b>Help Received</b> My mom helped me learn to use Excel for my charts and my dad helped me cut the blocks of wood.	