



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> <b>Corrina R. Thompson</b>	<b>Project Number</b> <b>J2035</b>
<b>Project Title</b> <b>Investigation for Conservation: The Observation of Which Grass Grows the Best with the Least Amount of Water</b>	
<b>Objectives/Goals</b> My objective was to see which type of grass would grow the tallest, densest, and greenest with the least amount of water. I wanted to determine if one grass is more drought tolerant so that golf courses and residences could change to a more water efficient grass.	
<b>Abstract</b> I used 3 large lasagna tins and filled each with potting soil and three types of grasses in each (Perennial Rye Grass, Annual Bluegrass and Creeping Bentgrass). Each sample of grass was the same size. I took initial measurements of height, density, and color. I measured and watered the grasses in each tin with different amounts of water each day, 100ml in tin #1, 200ml in tin #2, and 300ml in tin #3. After 3 weeks, I measured the height, density, and color of each of the 3 grasses in each of the 3 tins.	
<b>Methods/Materials</b> I used 3 large lasagna tins and filled each with potting soil and three types of grasses in each (Perennial Rye Grass, Annual Bluegrass and Creeping Bentgrass). Each sample of grass was the same size. I took initial measurements of height, density, and color. I measured and watered the grasses in each tin with different amounts of water each day, 100ml in tin #1, 200ml in tin #2, and 300ml in tin #3. After 3 weeks, I measured the height, density, and color of each of the 3 grasses in each of the 3 tins.	
<b>Results</b> The Perennial Rye Grass was a rich green color and grew the tallest with a daily amount of 100ml of water. It grew a height of 5.5 mm, followed by Creeping Bentgrass at 2.2mm, and Annual Bluegrass at 1.4 mm. The Annual Bluegrass had excellent color and grew the densest with the least amount of water.	
<b>Conclusions/Discussion</b> Perennial Rye Grass grew the tallest no matter how much water it was given, it had excellent color, and it maintained its initial density. My conclusion is that Perennial Rye Grass will grow the tallest, densest, and greenest with the least amount of water because it can adapt to the amount of water it is given.	
<b>Summary Statement</b> I studied three different types of grass to see which grass grew the tallest, densest, and greenest with the least amount of water.	
<b>Help Received</b> Brian Archbold, Golf Course Superintendent, El Niguel Golf Club, provided me with the 3 types of grasses and suggested how to water them. My mother helped me find websites to research and assisted with the assembly of my board. My family helped me water the grasses each day.	