



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

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Project Title Native or Not?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of the project is to study the occurrence of native and introduced species in various aged redwood forests in Humboldt County. The forests observed have been logged one or more times in the past. The hypothesis used was that there will be a higher occurrence of introduced species than native species in the younger stands. In background research it was learned that introduced species grow well in logging-disturbed soils. As time progresses the native plant population will dominate over the introduced species because they are well adapted to the stable redwood environment.</p> <p>Methods/Materials Eight redwood forests ranging in age from 0 to 90 years old were observed. At each location three plots were established, each of which was 10 feet by 25 feet. Using a plot card created for this study, the following data was recorded: species name, native or introduced, canopy position (tree, shrub, or herb), and percent cover (ocular estimate).</p> <p>Results The introduced species only occurred in two forests-the stands aged five and fifteen years. When they did occur they never dominated completely. However, the introduced species dominated the herb layer in both the five and the fifteen year old age stands. A total of 24 species were observed. Out of these, only three species were introduced. The introduced species were Pampas Grass, Himalaya Berry, and Dandelion. The most common native species were Sword Fern, Evergreen Huckleberry, and Redwood.</p> <p>Conclusions/Discussion The introduced species did not dominate in the early years, or at any time, as it was thought they would. Results did not support the hypothesis. This was surprising since background reading indicated that introduced species grow well in disturbed soils. From a forest management perspective, these redwood forests don't appear to be overly influenced by introduced species. It is interesting to note that the older forests with thick conifer overstories had no introduced species. If this project were to be done again an old growth forest would be studied and compared to the younger forests, possibly in the spring when foliage is out and flowers are in bloom.</p>	
Summary Statement The occurrence of native and introduced plant species were studied in various aged redwood forests in Humboldt County.	
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