



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Mackenzie M. Bailey	Project Number J1901
Project Title Eagle Lake Appetizers	
Abstract Objectives/Goals The objective of this research project was to determine the December food habits of the Eagle Lake Trout (<i>Oncorhynchus mykiss aquilarum</i>) in Eagle Lake located in Northeastern California. Methods/Materials A sample size of 50 Eagle Lake Trout stomachs were collected from licensed sportfishermen at the southern end of Eagle Lake during the month of December, 2004. The content of each stomach was analyzed in a laboratory setting and prey items were identified. Collection and analysis was authorized by Calif. Dept. of Fish and Game Lt. Warden Lisa Stone. Results In the 50 Eagle Lake Trout stomachs analyzed, leeches (30%) were the most frequent prey item identified. Also identified as prey items were : shrimp (26%), snails (26%), and Tui chubs (12%). Conclusions/Discussion Leeches (30%), shrimp (26%), and snails (26%) were concluded to be the three most frequent prey items selected by the Eagle Lake Trout during the month of December, 2004. Other items discovered in the Eagle Lake Trout stomachs analyzed included pieces of aquatic vegetation (tule, etc.) and plastic. A 10 cm by 20 cm piece of clear plastic was identified in the stomach contents of one sample. Below average lake level (- 4 ft.) in December of 2004 may have resulted in a lower shrimp prey frequency than has been discovered in the most previous food habit study completed in 1997. In order to manage this unique trout species, a thorough understanding of it's food habits and niche in the Eagle Lake aquatic ecosystem is of vital importance.	
Summary Statement This research project explored the prey item frequency for the Eagle Lake Trout (<i>Oncorhynchus mykiss aquilarum</i>) in Eagle Lake, Calif. in December of 2004.	
Help Received My dad, a U.S. Forest Service biologist and educator, helped transport me to Eagle Lake, Calif. to collect stomachs for analysis. He also served as a consultant on my project by reviewing my methodology and scientific writing.	