

## CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J2010** 

### **Project Title**

# **Eggxactly: Incubation Information**

### Abstract

## **Objectives/Goals**

Our objective was to determine the relationship of incubation time and egg volume in various bird species.

#### Methods/Materials

We selected several bird species based on their availability of fertile eggs and different egg sizes. our final selection included two species of quail, chicken, and duck eggs. we purchased an incubator that could accomadate all of our selected eggs.

After measuring the volume of all the eggs, we placed them in the incubator at a set temperature, which was a mean of the ideal incubation temperature for all four bird species. When the eggs hatched, we recorded the date and time. We then composed a chart showing the average time of hatching and average volume of the eggs.

### **Results**

We calculated the mean incubation times from the actual recorded time to hatching for various bird species. These data points were plotted on the Y-axis of a graph agaist X-axis which showed the average volume of each bird species.

### **Conclusions/Discussion**

We concluded that our project's hypothesis was met because in general, egg incubation time is proportionate to egg volume. The information from our project expands the knowledge in ornithology by showing that, in general, eggs with a larger volume take a longer period of time to incubate than eggs with a smaller volume.

## **Summary Statement**

To evaluate the relationship of incubation times and egg volumes in a variety of bird species.

## **Help Received**

Mother helped support idea for project and helped type report; Partner's mother helped in getteing all supplies.