

# CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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**Project Number** 

J1925

**Project Title** 

Is This the Secret to Less Expensive Poultry?

### Abstract

# Objectives/Goals

The purpose of this experiment was to determine whether it is necessary to rotate various types of bird eggs to achieve a high hatch rate or whether rotating eggs is an unnecessary and costly expense. The goal of this experiment is to save the breeders money on hatching poultry so that the cost of poultry could be lower.

#### Methods/Materials

In this experiment various types of bird eggs were incubated until they hatched. 116 Corturnix Quail, 18 Button Quail and 24 Chicken eggs were used in the experiment. The eggs were divided into two groups and put into two seperate but identical incubators, one group of eggs was to be rotated as a control group and one not to be rotated. A thermometor was placed into each incubator to make sure that the tempertures in the incubators were the same. After the eggs hatched the chicks were left to rest in the incubator until they were dry and then they were put into a brooder with food, water and a light to keep warm.

#### **Results**

This experiment established that rotating eggs does help to achieve a higher hatching rate. The results of this experiment with the Corturnix Quail were, 20% of the eggs hatched when they were rotated and 12% of the eggs hatched when they were not rotated. The results for the Button Quail were 67% of the eggs hatched when they were rotated and 56% of the eggs hatched when they were not rotated. The results of the Chickens were that 58% of the eggs hatched when they were rotated and 25% of the eggs hatched when they were not rotated.

#### **Conclusions/Discussion**

This experiment has proven that rotating eggs during the incubation period does help the eggs to have a higher hatching rate. Although breeders are spending significantly more money on rotating the eggs, they are getting a significantly higher hatch rate to offset that cost. Each breeders particular costs of rotating the eggs, determines whether or not this is a cost-saving option for him or her.

## **Summary Statement**

My project is to determine whether we can effect the cost of poultry by leaving out an expensive step in the incubation phase of raising poultry.

### **Help Received**