CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY

Name(s)
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Project Number
S1420

Project Title
The Effect of Water Pollution on the Development of Bullfrog Tadpoles

Abstract

Objectives/Goals
My objective is to determine if the pollutants in Lake Perris water are safe for the metamorphosis of bullfrog tadpoles.

Methods/Materials
The subjects were 61 bullfrog tadpoles. Five groups of tadpoles were tested, all with different ratios of pond water to lake water. Pond water was the control and was bought from a commercial laboratory supplies. To hasten metamorphosis four drops of thyroxine solution were added to each container. The outcome would be determined by mortality rate and growth rate of the tadpoles.

Results
The groups that achieved the lowest death rates and the highest growth rates were the tadpoles that were in the pond water. The tadpoles in the lake Perris water showed signs of growth retardation and eventually all died.

Conclusions/Discussion
My conclusion is that the pollutants in Lake Perris retard the growth and development of bullfrog tadpoles. I was able to witness a 100% mortality rate in the tadpoles that were in the Lake Perris water.

Summary Statement
Lake Perris water pollutants are not conducive to the growth and metamorphosis of bullfrog tadpoles

Help Received
Father supervised the project, mother helped with the decorations on the display board.