

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

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Project Number

J2406

Project Title

Tadpole Development and Temperature: Does It Matter?

Abstract

Objectives/Goals

The objective of my project was to determine if water temperature had an effect on the rate of leopard frog tadpole development and metamorphosis.

Methods/Materials

I raised twenty-four leopard frog tadpoles in three ten gallon tanks, each a different temperature. (18 degrees Celsius, 21 degrees Celsius, and 24 degrees Celsius). I meausured their change in length and their progression through metamorphosis.

Results

Tadpoles in the warmer water (21 degrees Celsius, and 24 degrees Celsius) were found to begin and complete metamorphosis faster than the tadpoles in the colder water (18 degrees Celsius).

Conclusions/Discussion

The results of my experiment suggest that warmer water temperature increases the rate of metamorphosis in leopard frog tadpoles.

Summary Statement

The focus of my experiment was to determine if water temperature affects the rate of development and metamorphosis in leopard frog tadpoles.

Help Received

Mother helped oversee entire project.