

# Small Fish • Big Questions STEM Kit



**G**uppies you see at the pet store come in a wide variety of colors and fin shapes. In this research experience, we will compare pet store guppies to guppies from high and low predation environments in Trinidad. Through careful observation you will get a feel for how biological changes over time occur. Although these guppies are tiny, they are helping us solve some of the biggest questions in science today!

**Big Concepts:** Evolution, variability, inheritance, selection, and time

**Scientific Inquiry Skills:**

- Observation of animal behavior
- Punnett squares and statistics
- Use of science notebook

**Grade Levels:** 6th grade and up

**Number of Kits per Set:** 15

**Student Group Size:** 2

**Time Required:** 90-120 minutes

**Web page:**

[cns-eoc.colostate.edu/smallfish.html](http://cns-eoc.colostate.edu/smallfish.html)

**Funding:** National Science Foundation

**Faculty Collaborator:** Dr. Cameron Ghalambor

These kits are used for STEM Friday field trips, teacher workshops, and may soon be available through the EOC Lending Library.



College of Natural Sciences  
Education & Outreach Center



Colorado  
State  
University

## **CNS Education & Outreach Center Mission Statement**

The College of Natural Sciences Education & Outreach Center is an incubator for innovation in STEM education. We serve both CSU and 4th-12th grade students and faculty through a variety of programs. Many of our programs focus on authentic scientific research experiences that aim to promote enthusiasm for the STEM disciplines, especially for students traditionally underrepresented in these fields. Particular emphasis is on finding new ways to promote scientific creativity and innovation, attributes essential for global challenges in the 21st century.

Learn more:

[www.cns-eoc.colostate.edu](http://www.cns-eoc.colostate.edu)

## **STEM Fridays**

STEM Fridays are facilitated by CSU undergraduate students studying to become science teachers, mentored by EOC staff. The science content has been developed at the EOC to give students a mini scientific research experience in a safe university laboratory setting. All content is tied to Colorado Science Education Standards and is compatible with the Next Generation Science Standards.

Learn more:

[www.cns-eoc.colostate.edu/cnseocstemfriday.html](http://www.cns-eoc.colostate.edu/cnseocstemfriday.html)

## **EOC Lending Library**

The EOC has a variety of STEM materials and kits available for weeklong loans by classroom and informal educators. Please visit the following link to see which kits are currently available.

Learn more:

[www.cns-eoc.colostate.edu/stemkits.html](http://www.cns-eoc.colostate.edu/stemkits.html)

*Discovery Begins Here*