



Colorado Science and Engineering Fair

2025 Individual Project Abstract Form

Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.

Title of Project: New Zealand Mud Snails and How Do We Get Rid of Them?

Finalist's Name: Thomas D'Attilo

School and City: Nevin Platt Middle School- CHOICE Program- Boulder, Colorado

Sponsor's Name: John Mattson

Category: Plant Sciences

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

My project is New Zealand mud snails and How Do We Get Rid of Them? My research focuses on eliminating New Zealand Mud Snails, an invasive species threatening the ecosystem in the South Boulder Creek riparian zone. These snails are a significant problem because they can drastically outnumber native species, with populations reaching up to 500,000 per square meter in just 2-3 years. They also consume valuable food sources for fish, leading to a decline in fish health and disrupting the entire ecosystem. Invasive species like these cost the world around \$423 billion annually. To address this issue, over one week, I tested ten different natural substances— baking soda, boric acid, cinnamon, citrus peels, coffee, diatomaceous earth, garlic, lime juice, salt and vinegar—on green algae, which is a major food source for the snails. I rated the samples against my control based on smell, water color and how much it harmed the algae. Baking soda was the most effective at not harming the algae or water color and with no noticeable odor.

I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.

Finalist's Signature:

Date:

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. **A signed copy of this form must be included in your notebook.**