

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Task Agreement #: G20AC00405

Project Title: Understanding Food-Web Connections to Support Ecosystem Resilience and Recovery from Brown Tree Snakes (BTS) Invasion

Discipline: Natural

Type of Project: Research

Funding Agency: United States Geological Survey

Other Partners/Cooperators: Colorado State University

Student Participation: No

Effective Dates: 09/01/2020 08/31/2021

Funding Amount: \$70,000.00

Investigators and Agency Representative:

Agency Contact: Ian Pearse; Fort Collins Science Center; 2150 Centre Ave Bldg C; Fort Collins, CO 80526; 970-226-9145; iplearse@usgs.gov

Investigator: Ruth Hufbauer; Dept Bioagricultural Science and Pest Management; Colorado State University, Fort Collins, Colorado 80524-1499; 970-420-3272; Ruth.Hufbauer@colostate.edu

Project Abstract:

Project goals: The goal of this research is to disentangle the food-web connections and understand the relative strength of difference processes.

Project objectives: Specific objectives include:

1. Conduct surveys of invertebrates across geographical locations with and without BTS to quantify the how food webs differ between invaded and uninvaded areas.
2. Conduct experiments to assess geographical differences in predation risk on invertebrates using clay model caterpillars.
3. Evaluate the relative importance of little fire ants and birds as predators of invertebrates on Guam.
4. Evaluate the effects of altered food webs on defenses against natural enemies.